American

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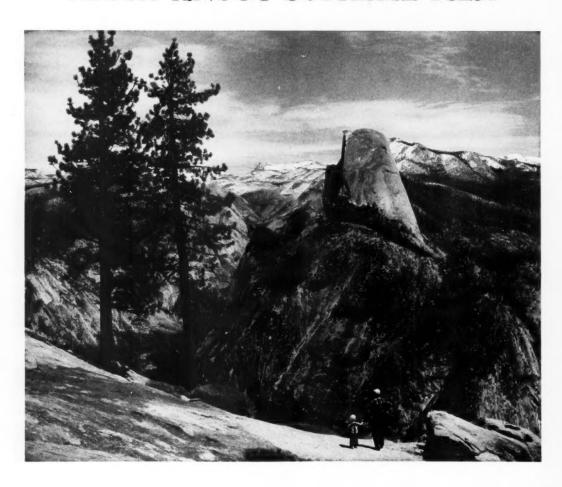
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#### Articles

#### American PHOTOGRAPH

MAY, 1952

Volume 46, No. 5

Eight French Photographers

The work of contemporary French photographers, among them, members of the Groupe des XV, reflects the temper of photography and esthetics in France today.



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Victor H. Scales, Hon. PSA

Human Interest for Your Pictures by Hans Kaden ..... 21

A subtle use of human beings in pictures can be very effective as well as add considerable interest to pictorial work.



Our May Cover



The vivacious blande on our cover this month is Phoebe Murray. Phoebe is a 20-year-old just beginning her New York modeling career. Sandi Nero, who made the exposure, says, "It's a first cover for both of us." Nero made the shot in a rapidly-exposed series with Rolleiflex and a single spotlight.

Negative Analysis - The Middle Way by John Nichols ...... 15 Transparency Correction with Watercolor Dyes by Nick Dudley ...... 40 Optics for the Photographer Table Top for Top Transition 

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#### Notes From A Laboratory

By Herbert C. McKay



#### VECTOGRAPH NOVELTIES

Now that Vectograph materials are again to be available you will no doubt want to get into the fun. Although this material was originally developed for making large stereoscopic prints, the process can be adopted to other uses, one of which will appeal to the non-steroscopic photographer.

The Vectograph is a transparency which consists of two different pictures upon the same transparent base. One picture is on the face, the other on the back of the base material. While to ordinary vision the result is a meaningless scramble of lines, when viewed by polarized light, either of the pictures becomes visible depending on the plane of polarization.

There are various ways of using this principle. The first is the small pocket picture.

Suppose, for example, we have a picture of a house and another of a room within that house. To make it more specific let us say we have a picture of Brown's house, showing the front door and the windows of the living room. Then there is another picture of the living room, with Mrs. Brown seated in a chair reading.

These two pictures are used to make the Vectograph. When it is done it is mounted in a pocket frame which has a circular mask. Included in the folder is a disc of Polaroid slightly larger than the opening in the mask. This disc bears two small marks upon the edge to indicate the two positions. When the Polaroid is placed over the picture in one position, the exterior of the house will be seen. If the disc is turned a quarter turn, the exterior view will dissolve and the interior will be seen.

It might be that Mr. Brown would prefer to have his wife in one picture and the children in another. Perhaps someone on a political fence would carry the portraits of two contending candidates, or a young fellow might carry pictures of two different girls. It makes no difference as to subject: any two pictures can be carried.

This scheme was elaborated by a photographer who was also an amateur mechanic. He made a fitting for a rather large locket in which the Polaroid was carried in position A. Anyone seeing the locket would see this picture and that is all. However, the Polaroid was carried in a spring ring which could be turned a quarter turn to position B to reveal a "secret" picture.

When released, the spring would return the Polaroid to its normal position.

A similar application was made by another home mechanic. He, however, adapted the idea to home decoration, there being more or less a vogue in "picture lights" for room walls. Nothing more than a picture frame about three inches deep, this carries a transparency in front and a lamp bulb in back. When lighted this not only provides diffuse illumination, it also exhibits the transparency. In its original form it is a decorative novelty. With the Vectograph added it becomes even more attractive.

The first of these which came to my notice were mounted in round frames a little less than seven inches in diameter. The Polaroid was incorporated in a revolving ring around the outer rim of the frame itself. This outer ring was provided with stops at the two quarter-turn positions. Just by turning the ring either one of two pictures was made visible. This is perhaps the least advisable of the various methods, although the simplest. The turning motion, obvious to any spectator, gives the show away.

The idea was further developed by one photographer who made use of a small synchronous motor, geared to one half revolution per minute, which drove the Polaroid continuously. There would then be a picture change each half minute. Actually a picture would be visible for perhaps ten seconds, then for 20 seconds there would be mixed pictures with the second picture visible for perhaps ten seconds. Although amusing for a few minutes such a device soon becomes dull and making more than one of these certainly is not advisable.

A friend of this man liked the idea but decided to make use of his own version. He made Vectographs and mounted them without the Polaroid. He then altered several 3-Di viewers (such as are used for viewing stereoscopic Vectographs) by removing the filters and reassembling them so that half of them had both filters at the opposed angle. Thus if you look at the dual Vectograph with one pair of viewers you would see one picture. When the other pair was used the other picture would be visible.

He made a few prints using a pin-up as one subject and various child poses as companions. The compositions were carefully chosen so that the dual picture was too confused to reveal either. Of course he would receive comments and questions about his pictures and, with prepared patter about his magic camera, he would give the viewers to the guests, taking care to see that they were properly divided.

You can imagine the cross-purpose comments which resulted. Usually after the initial period he had the guests exchange viewers (to make this easier, he had colored the mounts—red for one axis, blue for the other). The resolving of the mystery usually produced as much hilarity as the original confusion of comment.

To go to more serious applications, one amateur who is also a teacher, made up a combined print of the exterior view of the hand and an X-ray of the same hand in the same position. When used in class the first view seen was that of the hand. Then, as the Polaroid was slowly turned, the flesh grew transparent and the bones could be seen through the tissue. As the filter was turned still further the flesh disappeared and the bones were seen alone. This simple device proved more efficient for teaching than any number of composite drawings and pictures ordinarily found in textbooks. The relation of the bones to the soft tissues of the hand is so vitally presented that it is never for-

It was suggested that automobile manufacturers who spend large amounts of money in making "cut-away" motors for display at automobile shows, could make use of similar arrangements so cheaply that one could be placed in every dealer agency. In fact there is no limit to the educational and commercial applications of the principle of dual pictures.

The Vectograph is not difficult to produce. Neither is it the simplest photographic operation known. To explain it, let us refer to the dye-transfer process of making color prints.

The "print" is made upon a special film known as "washoff" film. When this film is exposed (through the base) and then developed in warm water, the picture is obtained, not as varying densities of silver, but as varying thicknesses of the gelatin deposit upon the base.

This thickness modulated film is then placed in a dye solution until the gelatin has absorbed all the dye it will take. The film is then removed and placed in contact with a sheet of paper and subjected to pressure for a certain time. The paper absorbs the dye and the picture is transferred from the master to the paper. The master can then be dyed again to repeat the impression.

It is a simple thing, but in actual procedure the process is inclined to be tricky until one becomes accustomed to it. However, once one gets the "feel" of it, it is no more difficult than any pictorial control process. The Vectograph is made in much the same way, but with a few important differences.

Two masters are required and these must be mirror images. In other words, one is made in the normal way, but the second is made by reversing the negative and placing the film side toward the film which is being printed. (This is not important unless there are significant rights and lefts in the picture.) This is not difficult if the printing is by projection, but for contact printing a point source of light is required to prevent diffusion.

The masters are washed down, then they are placed face to face and arranged for the best composite effect. It is advisable to have the images considerably larger than the finished print is to be. This permits a considerable amount of juggling of relative positions and still leaves a final image area fully occupied by both pictures.

When the best relative position is found, the two masters are held firmly in position and one edge, usually the top, is trimmed from both at one cut. This edge is now taped together with a waterproof adhesive tape. Naturally the field to be used must start below the tape line and the images must be so controlled upon the film, in printing, that the top of one picture is at least an inch below the edge of the film. This allows a half inch for trimming and a half inch for the tape.

When the two are then trimmed along all edges the master is ready for use. It might be added that the masters should be larger than the final picture. For making final prints 5x7, 8x10 stock is not at all too large to use.

The masters, taped together, are placed in the dye bath. However, it must be noted that this bath is not the ordinary dye used in color printing, but a special dye which produces an optically active image. This is the Vectograph dye (which I understand will soon become available once more).

The dyed masters are inserted in a rollerpress (clothes wringer) which lies flat upon the table. The rollers are turned enough to grip the taped leading edge. Of course, care must be taken that the dyed masters do not touch each other, and they are spread apart like butterfly's wings upon each side of the rolls.

A sheet of base material, a transparent, colorless plastic sheet which is optically active, is placed upright, with its lower edge resting between the rollers. The roll press is now operated. The masters are drawn through the rolls and their dyed side brought into close contact with the base material. The pressed sandwich is left under moderate pressure for a short time. Then the masters are peeled off leaving the transparent base with a picture on either side. When this is dry the picture is complete and when viewed by polarized light, will reveal the characteristic dual nature.

The significant factors in the process are the special dye used and the optically ac-

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#### **PHOTOGRAPHY**

136 East 57th St. New York 22, N. Y. tive base. Other than this the process is fundamentally no more than a version of dye-transfer printing. The latter is a measure of the difficulty of the process. Anyone who can do dye printing can make Vectographs.

While we are on the subject we might as well mention the stereo application. In this case the negatives used are stereoscopic and the registration of the two masters must be taken into consideration. The bases must be aligned, but there is liberal leeway in the lateral registration.

These Vectographs are viewed with the regular 3-Di goggles in which the filters are set at 45° so that one eye sees one picture and the other eye sees the other. This, of course, makes stereo vision pos-

sible. Because the size is limited only by the availability of film stock, huge muraltype pictures may be had in three dimensions.

We are told that experiments tending toward natural color Vectographs have been highly successful and that we shall, in the future, have available all of the advantages of the Vectograph plus the added feature of natural color.

If you are interested in stereo Vectographs, you should make negatives of adequate size. The Rolleiflex is ideal for this purpose if you can use successive exposures (motionless subject). For moving objects, however, I like the Rolleiflex and, by the way, its predecessor.

#### NEW ANSCO COLOR FOR PROFESSIONAL FILMS

Representatives of the photographic press were recently entertained in New York at the premier of MGM's "The Wild North," starring Stewart Granger, Wendell Corey and Cyd Charisse. The production is the first glimpse the public will have of Ansco's new negative-positive process for professional films.

Color Negative Type 843 is a multilayer film usable in any cine camera. It has a daylight (or color arc) index of ASA 16 which enables more stopping down and depth of field than some other color processes.

Release prints are made directly on Type 843 (Positive). Special effects are obtainable by printing back onto Negative Type 846 and intercutting this with the original master. Processing in slightly modified black-and-white machines requires only 90 minutes so "dailies" can be checked as shooting progresses.

The color is very easy to look at and faithful to the difficult light conditions under which "The Wild North" was filmed.

Ansco Color film will be available in both 35mm and 16mm widths.

#### TAPE RECORDERS SENT TO GI'S IN KOREA

Totaling nearly a half million feet of magnetic tape and about 48,000 minutes to provide for "talking letter" conversations between Gl's in Korea and their families in the United States, 4800 reels of "Scotch" sound recording tape and 12 Revere tape recorders have recently been shipped to the Orient from this country.

The recorders and tape are a gift from the Revere Camera Co. and Minnesota Mining and Manufacturing Co. to Army Service Clubs in Korea.

First pilot model of nation's newest tank, T-43, on test run in Newark, Del., was shot by photographer Nick Radford against sunset for dramatic effect.
Radford used a 4x5 Linhof Super Technika with 90mm Schneider Angulon lens, 1/25 at f/16, Wratten "A" filter. Super Panchro Press film, type B, developed in DK 50.



#### NEW DATA BOOK ON COLOR MOVIES

Better Movies in Color, recently produced by Eastman Kodak for the amateur movie maker, is concerned primarily with simple home films and should be very helpful and informative to the rapidly growing numbers of home movie enthusiasts.

The booklet suggests simple ways of making good color movies outdoors as well as inside, it lists the "big three" of color movie making and describes the methods for producing sharp, colorful and interesting pictures. Also included is information regarding successful home showings.

The 24 page booklet will be available from Kodak dealers and is priced at 35 cents.

#### DOLLINAS RE-ENTER U.S.

Once again making an American appearance, the Dollina cameras, manufactured by Germany's Certo Camera Works, are scheduled to be available in the near future. The Camera Specialty Co., 50 West 24th St., New York 1, N.Y., will be the distributors of the Dollina line.

#### INDUSTRIAL EDUCATION FILMSTRIPS RELEASED

The Use of Machines in Our Industrial Life is a new series of industrial education full-color filmstrips prepared by the Audio-Visual Division of Popular Science Publishing Co., New York, and Walker-Turner Division, Kearney and Trecker Corp.

The filmstrips, designed for junior and senior high school Industrial Arts programs, vocational-industrial schools and apprentice training programs, are made up of six full-length, 50-frame strips. The series covers "Circular Saw," "Jig Saw," "Band Saw," "Drill Press" and "Shaper."

The filmstrip package, including a helpful teaching guide, is housed in a hard cover file container and is priced at \$31.50.

#### BEIDLER INVENTION PRESENTED TO MUSEUM

Invented by George Chase Beidler in 1906, the Rectograph Photo-Copying Machine containing automatic processing equipment within its body, was recently presented to the George Eastman House in Rochester by the Haloid Co., also of Rochester, N. Y. Presentation was made by Joseph R. Wilson, Chairman of the Rocad

Beidler, a native Oklahoman, was engaged in the abstract business during Oklahoma's land rush in the late 1800's. His business, hand-copying transfers and title records for the unprecedented numbers of settlers who poured into the area, reached such proportions as to inspire his inventing a device for making photographs of the records. Beidler's idea, conceived in 1898, became an actuality in 1904 when he completed his first photo-copying machine.

Two years later the Rectograph Co., afterwards located in Rochester, was organized by him. It was in order to raise money for his new company that Beidler built the scale model now on exhibition at the George Eastman House. The model was carried from city to city to demonstrate the new process which now, in 1952, has attained proportions of a multi-million dollar industry.

#### **AMERICAN LIFE CONTEST**

With prizes totaling \$1025, the American Family Life photo contest sponsored by the United Brewers Foundation, is open to all press photographers from Canada and the USA. Closing date is December 15, 1952.

Requirements of the competition are that photographs represent diverse aspects of typical American life in the home and out-of-doors, at work or at play. Entries must have been taken between December 1, 1951 and November 30, 1952 and mailed in the form of 8x10 glossies.

Judges, to be named by the National Press Photographers Association, will award first prize of \$500, second prize of \$250, third prize of \$100 and fourth to tenth prizes of \$25 Defense Bonds. Judging will follow the NPPA point system.

Inquiries and entries should be addressed to American Family Life Photo Contest, room 1025, 420 Lexington Ave., New York 17, N. Y.

#### WRATTEN FILTER BOOK

Designed for laboratory workers in fields where spectrophotometric data is required for accurate results, the revised edition of the Kodak Data book, Kodak Wratten Filters for Scientific and Technical Use, has recently been released. It is priced at 75 cents.



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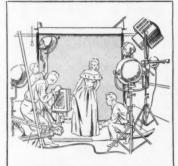
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#### SPEEDLIGHT

ANDREW F. HENNINGER

"I would like to know if it is possible to dip speedlight bulbs in the same coating used for flashbulbs or do speedlight bulbs have the right color temperature for daylight color film?"

R. C.-Battle Creek, Mich.

It would not be practicable to dip electronic flash tubes in a filter coating designed for flashbulbs because of the great difference in color temperature between the two light sources.

Most speedlight units provide light of the correct color temperature for average emulsions of daylight color film. Only occasionally will an emulsion number be encountered that requires the use of a color correction filter. In these rare cases the film is usually balanced for light of a lower color temperature. A correction filter, very lightly tinted with a color in the red portion of the spectrum, is then mounted on the camera lens. Only slight additional exposure is required.

"How can I get more flashes from one battery charge with my portable speedlight? The number of flashes obtainable seems to vary each time the batteries are charged."

A. J.-Los Angeles, Calif.

If your speedlight unit is of the low voltage type, electrolytic condensers are employed for the storage capacitors. When the unit has not been used for a few days the leakage rate of the capacitors is considerably higher than it is after they have been reformed by permitting the unit to charge for a few minutes. A large amount of electrical energy from the batteries is used in this process. Reform the capacitors the evening before you plan to use the speedlight and then give the batteries an overnight charge. All the battery energy will then be available to produce flashes the next day, with consequent increase in the number obtained before battery recharging is necessary.

All types of portable speedlights require judicious use of the "Off-On" switch

to obtain the maximum number of flashes from one battery charge. Leaving the switch continuously in "On" position, when taking a series of pictures, frequently results in unnecessary battery drain. With each two or three pictures taken, the expected short wait turns out to be an extended one. The speedlight, though fully charged and ready to flash, continues to draw current from the battery. Many extra flashes will be gained by flipping the charging switch to "Off" position when the capacitors are charged. Some units will hold a substantially full charge for a half hour or more. Others, which have insufficient resistance in the bleeder network, will drain off a charge quite rapidly. These require frequent nudging with the charging switch to keep them ready to flash.

When a speedlight delivers much fewer flashes than originally obtained, a failing capacitor or batteries ready for retirement may be suspected. With the first, it is best to promptly replace a capacitor that develops an abnormally high leakage rate. It is likely to fail and if your luck is bad it will occur at a most inopportune time, when you are placing absolute dependence upon the unit. Ordinarily, batteries will stand up under 200 or more charge-discharge cycles. That is assuming, of course, that they have been cared for properly. Few users do this until they experience at first hand the damaging results of omitting distilled water when needed and of leaving the batteries too long in a discharged or partially discharged condition. Sulphation, formed by this improper treatment, reduces the ampere-hour capacity and consequently the number of flashes obtainable before recharging is required. Batteries are not very expensive. It is good judgment to replace a set that is beginning to fail.

Most speedlight batteries have indicating balls, in a side channel, to show the degree of. charge. Sometimes the electrolyte in the channel remains of a different specific gravity than that surrounding the plates and provides a false indication of charge. Tilting the batteries a few times will remix the electrolyte and

#### PUSH PROTECTION FOR PRESS PHOTOGRAPHERS

The campaign to enforce protection by law to the working press photographer is being vigorously pushed by the National Association of Press Photographers according to information supplied to American Photography by Joseph Costa, chairman of the board.

This campaign has been extensively described in the pages of AMERICAN PHOTOGRAPHY in the July 1951 issue. That article described the many attacks made on the working press and incidents when the authorities failed to provide adequate facilities and protection to photographers in the performance of their duty to provide public information.

The NPPA before and since the appearance of that article have been campaigning for state laws which will extend the same protection—and the same privileges of a free press—to photographers which is now guaranteed to reporters. In furtherance of this aim, the NPPA has prepared a special kit for groups which are pressing for state laws. The kit includes a description of the steps necessary to have a law enacted, a sample resolution for presentation to the proper authorities, a sample statute and a review of the whole situation by noted press photographer and authority on their problems, Joseph Costa.

When other photographers learn that action is being taken in their own state to have such a statute introduced into their legislature, they are urged to give it every support by letters to their state legislatures and any other legitimate means.

Freedom of the press is an issue paramount in importance today. This is a way of doing something practical about it.

restore the accuracy of the charge indicator.

"Would the addition of a reactor in series with a flashfube increase the time duration of the flash enough to escape the reciprocity failure of the film?"

W. L.-Schnectady, N. Y.

The photographic effectiveness of the light would be decreased by connecting a reactance in series with the flashtube, because of the additional electrical losses introduced into the circuit. While the time duration would be lengthened, the extra losses would more than off-set the slight gain obtained by reducing the effects of film reciprocity failure.

Many speedlight users consider reciprocity failure of the film emulsion overrated in so far as practical photographic results are concerned. The films which give best emulsion response to speedlight are widely known and, if desired, may be used in preference to those giving lesser response.

"More information please on the special processing of color film to increase its speed with electronic flash. Doesn't this affect the color balance?"

C. K.-Milwaukee, Wis.

When less than normal speedlight exposure is applied to daylight color film blue tones tend to predominate. The special processing restores the color balance. Two experts in this field, the Kalinowski brothers of 707 Boulevard Street, Syracuse 11, New York, have tested and experimented for several years to reduce the exposure and development technique to an exact science. They now have available a computer for determining the correct exposure and a detailed instruction manual for using color film of the home processing type at doubled film speed.

I recently saw nearly 200 transparencies made by this system. The color balance and general quality was equal, if not superior, to transparencies given recommended processing.

#### STEREOSCOPIC MOVIES

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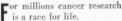
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#### He Likes Us

Gentlemen:

A few months ago I expressed a few acrid remarks concerning your all-out effort to push "modern" photography to the front. My viewpoint as expressed then remains the same.

Your last three issues, however, prompt me to write you once more and express satisfaction in your apparent change to cover the whole field of photography. Pictorialism was given its proper niche in the scheme of things. In fact, of late, your "modern" examples have taken on a marked pictorial flavor.

The March issue was indeed enjoyed. The folio "One Model is All You Need," by Syzdek was splendid. Any pictorialist would be proud to produce such pictures. The article by Kaden, "Look Down Before You Shoot," was another gem . .

John S. Anderson, M.D. Grand Island, Nebraska

#### Pictorialism

Your interview with Adolf Fassbender on the subject of pictorialism has prompted me to write you some comments on the same subject.

I used to be quite strongly on the side of those who maintain that salons and pictorialism are exerting a smothering influence on creative photography today. Recently, however, I have re-examined my views, and I now feel that pictorialism and salons do provide a creative outlet for hundreds of people-people with more or less conventional artistic tastes, who like the old masters and whose closest approach to modern art is probably Van Gogh. These people live conventional lives in homes of conventional architecture and, for the most part, have little desire to become great photographers.

. . . Pictorialism is creative in the sense that an individual has created a photograph which to him and his associates is pleasing and perhaps beautiful. The chances are that he has not created in the sense of producing something new for, as Mr. Fassbender aptly states, "most, if not all, of what appears 'new' today has appeared in salons of the past."

Let us not disparage pictorialism too strongly. Although the pictorialists may seldom produce great photographs, it must be remembered that greatness is the property of the few, but there are many pictorial-

> Woodlief Thomas, Jr. Rochester, N. Y.

#### The Year's Photography

Gentlemen:

In thanking you for your excellent review of The Year's Photography 1951-52. I would like to make a few observations which may interest your readers who are collecting these annuals:

1) The next issue will be printed on white art paper of the finest quality obtainable under prevailing local conditions.

2) The medical illustrations will be omitted in the future, since some people find them "objectionable."

3) To enable the publication to be advanced to 1 October, 1952, the short reviews on the sections will be replaced by a comprehensive review covering the whole exhibition.

4) Finally, I would like to point out that the Exhibition includes work by all types and nationalities of photographers and cinematographers, not merely "British professionals." We welcome all amateurs and professionals to this Exhibition as we do to this world-wide Society.

> L. E. Hallett, Secretary The Royal Photographic Society of Great Britain 16, Prince's Gate, Kensington London, S. W. 7

#### **Exchange Mart**

Gentlemen:

Can you please put me in touch with an amateur photographer who would exchange a subscription to AMERICAN PHO- TOGRAPHY for, say, an annual subscrption to The Times Weekly Review either air mail or ordinary edition?

As the Review costs \$5 for ordinary edition and \$10 for the air edition, I am not much bothered about the difference in price—I would consider receiving A.P. regularly and the chance of swapping letters and views with another amateur photographer on your side worth it. (I am not a beginner.)

Mr. Edwin Dunn 92, Melbury Gardens London, S.W. 20 England

#### **U. S. Photo Magazines Wanted**

Dear Sir:

I am hoping to start in the near future a, Photographic Club in the school in which I teach. I should be very grateful if any of your readers could let me have any photographic magazines which they have finished. I am already in receipt of photographic journals from France and I feel that any American magazines would help my boys to broaden their outlook.

J. Lipton 46, Byron Court, Byron Road Harrow, Middlesex, England

#### Who Will Help a British Officer?

Dear Sir:

Your magazine is the first I have ever read from the U.S.A. It was sent by a patient at the Veterans Hospital, Rutland Heights, Mass., who saw a letter bearing my name in the English paper Amateur Photography.

I ask you to publish this letter for two reasons: I would like to correspond with anyone interested in indoor portraiture and similar studies, and I am starting a photographic school for the troops. Though limited enough, my knowledge would be helped considerably if anyone can send his used magazines which would be gratefully and usefully received by all.

Captain John F. Pengelly H. Q. RAOC 2nd Inf. Division B.A.O.R. 4, Germany



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#### **CLOSE-UPS**



Daniel Masclet, by Todd Webb

• When the editors first wrote to Daniel Masclet they asked him to select "about a half-dozen prints" to represent contemporary work in France. Masclet promptly overwhelmed them with two big packages containing dozens of prints from over twenty photographers. Together with these were extensive notes on the photographers and quotations from many of them on their opinions and point-of-view.

This response was both canny and typical. Canny, because it relieved M. Masclet from the onus of picking the "best" from the work of his contemporaries and friends, typical because he seems to do things in a big way. His own production of photographs is large, yet he succeeds in maintaining a high quality even when coupled with a quantity output.

The editors hope that this selection of French photography will inspire American workers. There is much here which is characteristic of good photography anywhere in the world, but also there are fresh approaches which may inspire other photographers, not to imitate, but to re-examine their own work and perhaps thereby to gain new insight and expressiveness.

• Vie Scales had so much to say this month in For Members Only that there wasn't room to print all of it until June. However, on pages 58 and 59 he discusses planning in camera clubs as well as the familiar but proverbially unsolved problems about the qualifications of judges, their methods of rating photographic work.

#### PHOTO TECHNIQUE TESTS MISSILES FOR USN

A new photographic technique to test the flight of the U.S. Navy's newest projectiles in the Aerohallistics Laboratory has been announced by the U.S. Naval Ordnance Test Station at China Lake, California.

This technique, multiple-image silhouette photography, measures the deviation of a missile in flight and determines its aerodynamic and ballistic characteristics in six photographs on a single plate. These are accomplished by means of successive light flashes of micro-second duration stroboscopic light.

"While neither stroboscopic nor silhouette photography is unique," reports E. C. Barkofsky of the Naval Test Station's Research Department, "the combination of the two constitutes a new technique."

The missiles, launched from a three-inch gun, are photographed at four foot intervals during their flight by each of 23 precision ballistics cameras to record transonic and supersonic flight.

There was some difficulty in obtaining satisfactory contrast between missile and background to provide sharp definition, for Navy researchers had discovered that the contrast decreased with the increase of superimposed light flashes. Thus reflective sheeting, composed of millions of small glass beads, was found to produce sufficient background intensity and yield negatives of sufficient contrast. The glass bead sheeting is said to reflect light 225 times the power of ordinary white paint.

Located in the middle of the Mojave Desert, the Test Station was established during World War II in a rocket development program.

#### EKTACHROME TYPE B ROLL FILM AVAILABLE

Kodak Ektachrome Roll Film, Type B, designed for indoor picture taking with artificial illumination including flash, has recently been announced by the manufacturers.

The new film is color balanced for photographing with clear 3200° flood lamps and use of a Wratten 81-EF filter is required in order to adjust color balance of light from clear flash lamps when the film is used with such sources of illumination.

Data sheets packed with each film will enable photographers to know which filters should be used with the particular emulsion when using flash and photoflood lamps. Though the film will not be processed by the manufacturer the company will gladly provide on request a list of processing stations in all sections of the country.

Type B Ektachrome Roll Film is to be rated at ASA 10 for tungsten illumination,

at ASA 6 when used out-of-doors with Wratten 85-B filter.

Available in 620 and 120 eight exposure rolls, the film is priced at \$1.79.

#### ECLIPSE PHOTOGRAPHED BY SPECTROGRAPHS

Scientists gathered at Khartoum in the Anglo-Egyptian Sudan recorded a total eclipse of the sun seen only in that hemisphere late in February. Photographs were made with a spectrograph. It is reportedly the most sensitive optical instrument thus far devised for detecting minute chemical particles.

Replacing quartz or glass prisms, diffraction gratings, called "optical gems," were incorporated in two of the spectrographs to break down light rays into a spectrum according to wave lengths. The gratings measure six inches long, five inches wide and have surfaces ruled with 135,000 lines.

#### FRUIT COMPANY WANTS PICTURES

UNIFRUITCO, the United Fruit Co. employees' magazine, is looking for photographs.

Editor David D. Zingg is especially interested in coverage of the countries in which the company operates—Columbia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua and Panama. More information write to David D. Zingg, editor, United Fruit Co., 80 Federal St., Boston 10, Mass.

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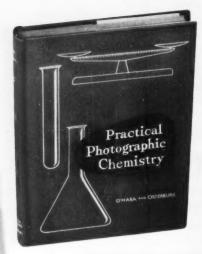
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by C. E. O'Hara & J. W. Osterburg

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Co-authors O'Hara and Osterburg hold Master of Science degrees in physics and chemistry, respectively, and are both members of the New York Police Laboratory, where they have developed numerous photographic crime detection techniques. Few men in the world today are better qualified to tell you about the chemistry of photography.

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George B. Wright, Editor

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## NEGATIVE ANALYSIS

#### THE MIDDLE WAY

Text and photographs by John Nichols

ETTERS FROM READERS of this magazine often state, in effect: "I have no opportunities for guidance in photographic matters, yet I want to get negatives of the best quality. How do I go about learning to do this?"

This question has given me considerable food for thought. True, I was partly self-taught (and mighty expensive teaching it was). But I also had priceless help from others, and whether I would ever have learned without that help I cannot say. The path to negative perfection is a steep and stony one at best. But climb it we must:

the amateur, to reproduce his subject with fidelity and planned interpretation; the professional, in addition, to attain the reliability his clients demand and the standardization which leads to profits.

How can a person working alone develop the required judgment?

Previously published material on this subject reflects the art-versus-science schizophrenia that so often splits the photographic mind. The artist proposes nothing more definite than a repetition of mistakes until a *feeling* for good negatives is acquired. The scientist becomes involved in sensitometry, calculations, and elaborate records, requiring more time than the average man is willing to invest in the subject.

I believe that there is a middle way, whereby anyone who is willing to invest two evenings can learn to analyze a negative correctly.

By negative analysis is meant the study of a negative which determines 1) whether it is perfect, or incorrectly exposed, or incorrectly developed, and how much; 2) what paper grade and exposure time, in general, to use for the print; 3) how to improve subsequent exposures.

There will be some who do not see the need for such study. Films have so much latitude, they will say, and

almost any negative can be made to yield an acceptable print; so why take the time from more creative pursuits? This objection is weak on four counts:

1) It is traditional, in writing of the admittedly great latitude of modern films (which contain such skillful mixture of fast and slow grains) to say that, whereas the film is capable of recording brightnesses of a range of 1:256 or so, subject brightnesses rarely exceeds the ratio 1:30, giving a possible exposure range of 15:240 or 1:16. What this statement overlooks is that, first, the extreme ends of this



Subjects vary in brightness and range and may require different exposure and development for satisfactory results.

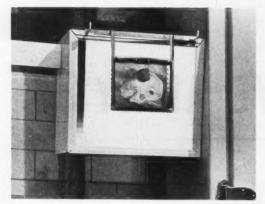


FIGURE 1

#### NEGATIVE ANALYSIS

This viewing box has a step tablet or transparent gray scale mounted at the side of the glass, an inexpensive aid in standardization.

This is an appropriate subject for a comparison negative set. There is a great range of tones and it is easy to reshoot if necessary.



FIGURE 2

range are most unsatisfactory from a practical viewpoint, and, second, that when all details of a subject are considered, rather than merely the masses, the range of brightnesses will probably exceed 1:30. On the window-sill of the house opposite me as I write, a white cat, (400 foot-candles?) waits to be let in while its owner (5 foot-candles?) reads his paper in the shaded room beyond; a range of 1:80. Yet such a scene would be considered "average!"

2) What is an acceptable print? The man who leaves his film at the drugstore and the successful photo-illus-

trator differ on this point.

3) As a marksman aims at the bull's eye, hoping to hit the target, so the photographer aims at perfect negatives, so that substantial errors may yet result in good negatives.

4) A man must learn to walk before he can run; a photographer must learn to control his medium before he can create in it. Without control, photography degenerates into a series of lucky accidents. Eliza succeeded in crossing the flooded Ohio river on drifting ice, but refrained from writing a book on "Creative Traveling."

Others, at this point, will remark: "Oh Lord, another 'Snapshots-Made-Easy'-type article!" No, if there were anything to be gained by it, I would like to dwell on the complexity and subtlety of the photographic process. Such an approach would induce, in the readers to whom this article is primarily directed, a mood like that of the little boy who, the New Yorker reported, had just learned to count to twenty. "How many numbers are there?" he asked his mother. "Oh, lots and lots of them," she answered offhandedly, and soon thereafter noticed the boy crying quietly.

Side-stepping less practical aspects of the subject, here are two simple, definite procedures for learning negative analysis.

1) Get a proper negative viewing box and use it. This suggestion is so simple as to sound absurd. Yet how many of us view our negatives by whatever light is at hand—thereby losing a valuable chance to standardize our work! Art directors who pay five hundred dollars and more for a single color transparency do not depend on makeshift viewers, you may be sure; they use a manufactured viewing box which is standard for the

graphic arts industry.

A good viewing box has diffused, evenly distributed light of very low intensity. The viewing box is often the first light that is turned on after developing film, when one's pupil is greatly dilated. If this is the case, a strong light will cause large errors in judgment, making a negative appear thinner than it is.

The box should be over the hypo tank or a sink. A minor electrical hazard is present here; one might touch faucet and switch simultaneously; and hypo is a good conductor of electricity. If the box is of metal, it should be permanently grounded to a water pipe with No. 20 or heavier wire. Pull chains should have the chain replaced with string; metal snap-switches should be avoided. (The same goes for safelights.)

Any commercial safelight or large-transparency viewer can be adapted to this use if even illumination can be

achieved.

Figure 1 shows a home-made viewing box. It is lined with aluminum foil and its front is an 8x10-inch opal glass. It is lit by two seven and one-half watt white lamps. A Weston meter was passed over every area of the glass, and little bits of foil were pasted on the lamps to shade the glass, until the meter reading was everywhere ten. An even lower brightness might be desirable. At the side of the glass is fastened a step tablet, or transparent gray scale (Eastman Kodak Company, about \$3) as an aid to standardization.

For those who do not have a permanent darkroom, a contact printing box, dimmed down with thick tissue, will serve. (Don't drip hypo!)

2) Make a series of nine standard comparison negatives. These may be any size from 2½x2½ inches to 4x5 inches.

Choose a subject with care. It may be a view, a portrait, a still-life, or whatever your major interest is. It must have a full range of tones, but should be as nearly typical as you can conveniently arrange. It is desirable to include a gray scale in the scene. And it should be a subject which can be conveniently re-shot. (Figure 2)

Calculate carefully the correct exposure for this subject. Expose three negatives at this exposure. Make three more at ½ this exposure, and three at four times this exposure. Identify the holders. If you are using a roll film, make the exposures in three groups, with a normal, ½ normal, and 4x normal exposure in each group; and provide ample space between each group so that they can be cut apart in the dark before development.

Develop one group (normal, ¼ normal, 4x normal) for the normal time in your customary developer. Give a second group ½ normal developing time, the third group 1½x normal. Control temperature accurately.















Standard comparison negatives, left, may be used for reference in analyzing negatives and as aids in standardization. Figure 4 is a straight print from E, center negative Figure 3. In Figure 5 the standard comparison set is being used to determine the type of a new negative.







FIGURE 3





FIGURE 4



If the original calculated exposure was correct, you will have a set of negatives like this: (Figure 3)

	Under-exposed	Normal exp.	Over-exp.
Under- developed	A	В	С
Normally developed	D	E	F
Over-developed	G	н	1

Identify all negatives by letter before you forget which is which. Then make the best possible contact prints, or small enlargements, of all nine negatives, using only your normal paper (ordinarily, grade two). Do not dodge, burn in, or vary development. The print from E should be excellent. (Figure 4) This is in accordance with the Eastman Kodak Company's definition of a correct speed rating for film as the minimum exposure which will yield a print of excellent quality.

Mount these prints together for reference if desired.

At this point, get expert help if possible. If not, study the prints carefully, note presence or absence of highlight and shadow detail, all-over contrast, and general appeal. Compare the original gray scale, if one was used, with its reproduction in the print. Then decide which is the best.

If one of the other prints is definitely better than E, refer to the table, below, and make another set of negatives, correcting the normal exposure as shown. For instance, if G is best, the correct normal exposure is  $\frac{1}{4}$  the former, and the correct normal developing time at that temperature 50 percent more.

#### CORRECTION TABLE FOR COMPARISON NEGATIVES

Negative	New normal	New normal
yielding	exposure time,	developing time,
best print	percent of old	percent of old
A	25	66
В	same	66
C (see text)	400	66
D	25	same
E	same	same
F	400	same
G	25	150
Н	same	150
1	400	150

Note, in the case of negatives G and C, that development has tended to correct the exposure, so the resulting print should be quite good. In fact, C may be the best print even in a correctly exposed series, excelling the others in shadow detail. This does not mean that, if C is best, we must change our exposure and development procedures to suit. It does mean that, with subjects of high contrast, when light and movement conditions permit, the over-exposed and underdeveloped, type C negative should be made.

The print from G, otherwise excellent, will be found somewhat lacking in shadow detail.

Thousands of words might be written on corrective development; yet comparing G, E, and C will explain in a moment how known over- and under-exposures can be normalized without harmful distortions of tone.

Over-development is customarily used in "availablelight" photography, and when weak electronic flash outfits are the light source. Underdevelopment is common in fields like the photography of interiors, where exposures are figured for the lowest important brightnesses in the scene, causing other parts (windows, for instance) to be greatly overexposed.

A and I, being incorrectly exposed, were developed in a way which exaggerated rather than corrected the fault, and will not print satisfactorily on normal paper. (A requires more contrast, I less.)

Next, make a set of good prints from the nine negatives, using whatever grades of paper will do the trick, matching each of the others to the best print from E. Keep a record of paper grade and exposure.

The negatives may now be mounted together in holes in stiff cardboard, with identifying letter, paper grade and exposure required to print, written below each negative. This assembly may be wrapped in cellophane, and hung up near the viewing box. When viewing a new negative, compare it with the standards, and from the one which it most resembles determine the type of negative and what paper contrast it required. (Figure 5)

As we look at these mounted negatives, we note that, as a transparency, or transparent picture, G is much the best negative and G the worst. But we have already found by experiment that, from the standpoint of which makes the best print, G may be the best! Thus we are warned against the trap into which even experts and professionals fall: unconsciously judging a negative on esthetic grounds.

With the help of this standard negative set, we can now understand how to correct for subject contrast. Figure 6 Examples of insufficient and excessive subject contrast are seen in the two shots (Figure 6) below. Too little contrast in the doorway makes the scene too flat and dull.



shows examples of insufficient and excessive subject contrast. The resemblance to straight prints of A and H or I is evident, and corrective development is indicated, so that a negative resembling E will be obtained.

There is something to be said, from the esthetic standpoint, for trying to keep the original contrast values of the subject, but in practice such attempts often fail. The viewer's eye automatically compensates for the lack of contrast of an actual scene, but not for a similar lack in a two-dimensional reproduction of such a scene. In the case of an excessively contrasty scene we are up against something much more practical: to hold detail in both bright and dark areas of the print of a contrasty scene, the tone-scale must be greatly compressed. The contrast of important details must be cut down to the maximum (about 1:30) permitted by the paper.

In his charming book, "This Flowering Earth," Donald Culross Peattie tells of a little girl, daughter of an amateur botanist. When offered a flower, she said: "It's lovely! But please don't give it to me! If I take it home daddy will make me analyze it!" The kind of analysis we propose here is not destructive of beauty; but will help us preserve the transient beauty of the world around us.

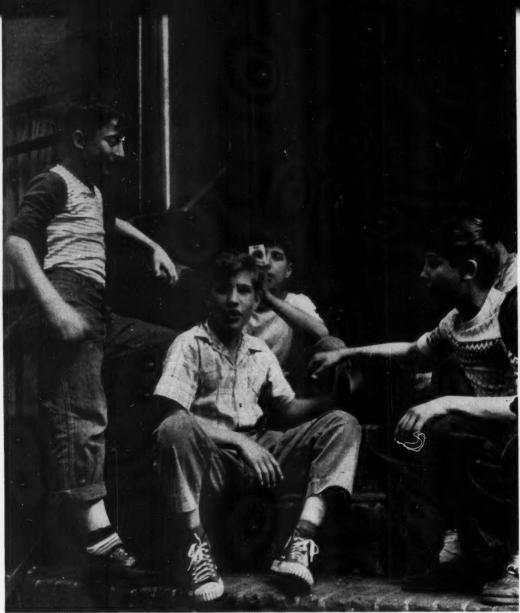
FIGURE 6



Here the contrast is too accentuated. Corrective development is required.

HUMAN INTEREST FOR YOUR PICTURES

BY HANS KADEN, FPSA, FRPS



Sandi Nero

The documentary, so closely linked to human interest, can be artistic as well, says this noted pictorialist. The human values in Nero's shot (above) are paramount, but it is also expressive as a picture, a "document" which is more than an instantaneous glimpse of life.

#### HUMAN INTEREST FOR YOUR PICTURES

THE GREAT MAJORITY of pictures have human beings as subjects, people young and old, happy or sad, attractive or otherwise, well-groomed or rugged. Portraiture, illustrative photography, pictorialism, photojournalism and record photography all record human beings in every situation of life. Even the beginner usually first turns his new camera on his family or his friends.

In two types of pictures human subjects are utilized to express an idea. This idea is based on the emotional response of the photographer to the particular scene before his camera.

The first of these types is the so-called documentary picture where the maker tries to record people living under conditions which are unfamiliar to most of us and often hard to conceive; pictures of the penniless, ill-clad and ill-fed living under pitiful conditions. The purpose of making these records is often to help these unfortunates by exposing shocking conditions to impel action.

As such, they have real value. Are they also a part of photographic art? They can be highly artistic. Outstanding examples often can be seen in exhibitions and many millions have seen the series of "Spanish Village" pictures by W. Eugene Smith recently published in Life.

Only the eye of an artist and the emotional reaction of one can create such masterpieces.

"Pictorial" documentations are generally accepted as art. But there are too many of these which are nothing more than snapshots. It is often difficult to draw a dividing line. The accompanying shot of a group of boys in New York's East Side by Sandi Nero is an example of documentation which goes far beyond the snapshot class.

The subject of documentation does not always have to be unpleasant happenings. "Lifeguards" records a scene which is refreshing rather than appalling. The healthy looking lifeguards on a beach going in for a rescue create a great emotional effect, actual as well as pictorial. Most of us have seen them in action and we cannot help feeling admiration for their efficiency and feeling greater security for ourselves.

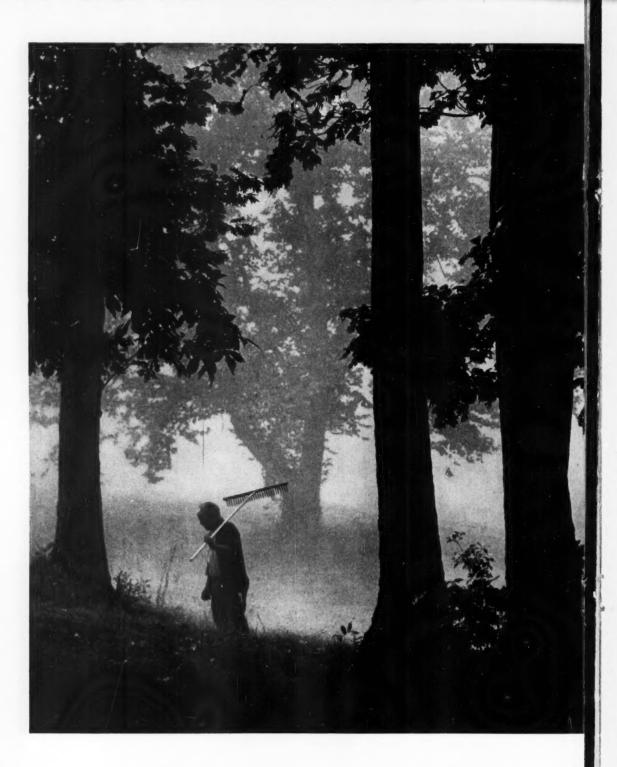
The other type of picture utilizing human subjects (except portraiture) are pictorial types where humans are introduced to add interest to an otherwise "empty" scene.

This "human interest" can also be animals such as dogs, cats and horses; even such objects used by man as an old stove, a half-filled ash can or a doctor's stethoscope, can contain this human interest.

As an example of this, suppose we come upon an old shack near the waterfront, a strange subject, indeed. We will probably wonder whether it is occupied or deserted, whether it will be used for human beings or allowed to

These life guards pushing a rescue boat into the water provide an emotional thrill which goes beyond the merely decorative values of the picture. All pictures except that on page 22 are by the author.





#### HUMAN INTEREST FOR YOUR PICTURES

sink into decay. How can we show what we feel about it? If a suitable individual is nearby we can use him as part of the picture and thus tell the spectator that the shack is still linked to human use.

Much of the time there will be no suitable model and we will have to take the pictorially interesting shack in its surroundings and have just a record. But even if there is only a cat or dog nearby which—we can coax into the scene to sit by the doorway we will have added human interest. The living creature implies that there are human beings around.

Naturally people will provide a better supplementary subject. The picture "Autumn Pattern" was taken on a golf course, but the scene itself, while it had an interesting play of tone values was too quiet and peaceful. The necessary human interest was added in the person of a farmer who was raking hay nearby. He agreed to walk into the scene along a predetermined path and the exposure was made when he reached the point where he seemed in the best position.

Notice that the farmer is made secondary to the whole scene. This is the way human interest should be employed in pictorial work.

There are two ways of subordinating a figure: be careful not to have the figure too large in relation to the whole and keep the face of the figure turned away from the camera. As a general rule, the figure should not be larger than about one-sixth of the diagonal of the print. If it is larger than this it will dominate the picture and we will end with a photograph of a human subject with a landscape background.

On the other hand, if the figure is too small it will be of little help and may better be left out. If you use people, either subordinate them to the scene as a whole or make the figure dominate the whole composition.

The figure must also be appropriate if it is to add meaning to the scene. It would be wrong to put a dressed-up city dweller, male or female, in the surroundings of a farm. If your wife accompanies you on a picture hunting trip, take along some "props": a bandanna, material for draping a long skirt and perhaps a basket to convert her to a farmer's wife on a walk through the fields. Or a friend may be changed into a farmhand by a suitable shirt and dungarees. In both cases, they should be faced away from the camera lest their faces reveal the fake.

It is best not to use small children for this purpose. A three-year old boy in the woods, a two-year old walking along furrows in the field, or either sitting on a landing near the water will give the onlooker an uneasy feeling.

We know that parents would not let a small child be alone in the woods or near the water and we feel that the parent is right outside the frame of the picture. In other cases, the little ones look as if they are in immediate danger and the peaceful scene the artist has attempted to create is completely lost.

The qualities of the original scene would not be so vividly projected in this picture if it were not for the figure of the man. As Kaden explains in his article, the man was working nearby and was persuaded to walk through the picture area. Caught at the right point, he completes the picture.



These two groups of children, says Kaden, compete with each other and since neither of them is dominant, the picture does not hang together.

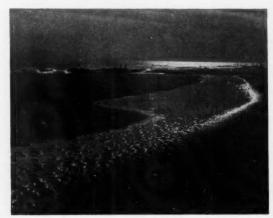


"I waited too long," says Kaden. The horses should have been caught at the intersection, now they are too dominant and the driver merges with the horses.





A figure walking toward the house would add interest to the picture and would also have made a better balance to the large trees in the foreground.



Despite the interesting sand pattern, Kaden feels the scene is too empty. Playing children might have provided the necessary human interest here.

This needs a figure walking along the road toward the distant village, Kaden believes, and the tree merges too much with the shack at left.

#### **HUMAN INTEREST FOR YOUR PICTURES**

Another frequent mistake is to go to extremes in dressing up models. The clothing should be unassuming because the figure must be subordinated to the whole.

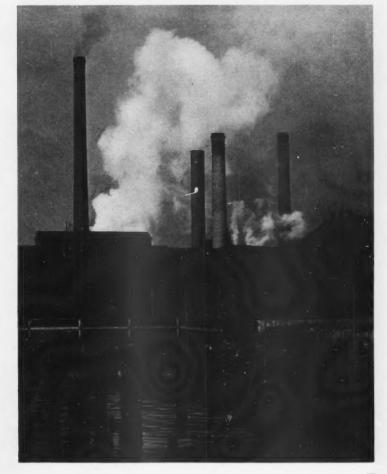
How can we determine when we should add human interest to our pictures? This will depend on the scene itself. A dramatic scene with contrasting tone values where the play of light creates a strong pattern would not need a figure. In fact, the use of one would lead to divided interest. But if the scene is calm and peaceful with harmonious tone values, a figure will often help.

Also, scenes of farmhouses with empty roads leading to the farm and city scenes do need a human figure to prevent them from becoming mere real estate records. Landscapes and snowscapes with a wide road leading into the distance will look empty and uninteresting without a figure or a horse-drawn wagon. But don't use your car for this purpose. It will not be appropriate and because of changing styles, the picture will become "dated." A pictorial picture should be timeless, so the human interest should be also timeless in clothing and vehicle.

When you find an interesting outdoor scene, ask yourself whether or not human interest will improve the subject. It may be advisable to come back another time when we have arranged for someone to pose.

I have made bad shots, too, many of them. But in the hope of giving greater help, I open my file and show you here some of the "bad ones," pictures taken for pictorial reasons but where the human interest is insufficient to prevent them from being top shots. I hope you can learn more from these "bad" shots as from the better ones.

Here is a scene which does not need the presence of a human figure to give "human interest." The human 'element is implied within the picture and a figure might even be distracting.





#### EIGHT FRENCH PHOTOGRAPHERS

ANDRE THEVENET
ROBERT DOISNEAU
JOHN CRAVEN
HENRI CARTIER-BRESSON
LUCIEN LORELLE
IZIS (BIDERMANAS)
PIERRE BELZEAUX
DANIEL MASCLET

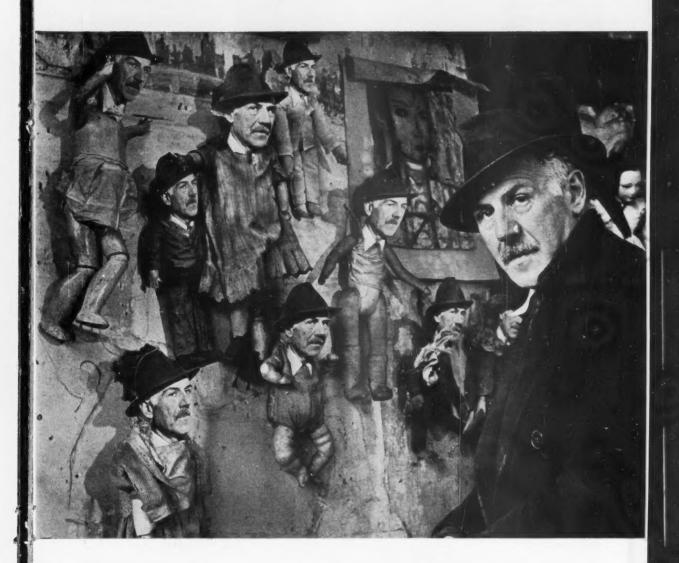
FRENCH PHOTOGRAPHY has always occupied a high place in the art. Contemporary workers have surmounted extreme difficulties and shortages of sensitive materials and are still turning out work which is remarkable for its sensitivity and its skill. American Photography is pleased to present in its pages this group of contemporary work which was assembled for our readers by Daniel Masclet, himself an outstanding photographer and the organizer and moving spirit of the Groupe des XV. This latter, a sort of "Oval Table" of advanced workers, includes several of those whose work is shown here. This collection should be an inspiration to Americans.



#### EIGHT FRENCH PHOTOGRAPHERS

Doisneau has had work exhibited several times in America but comparatively few of his prints have been made available to a wide public here. His work is currently on exhibition at the Museum of Modern Art in New York together with that of Izis and Cartier-Bresson whose work is also shown here.

Doisneau pursues the "fugitive treasures" of quickly-observed glimpses of life, but protests that he seeks in these "the tender



and gentle portrait" for he is habitually afraid of making an image which will hold the innocent up to ridicule of a million readers. The vigor of his work may be seen in the contrasting prints on these pages, one the quickly-caught dreamy expression of a girl, the other the mannered portrait of an artist with the multiplied images of his face in the background like reinforcing echoes.



JOHN CRAVEN

#### EIGHT FRENCH PHOTOGRAPHERS

CRAVEN, despite his name, is thoroughly French. He says of his work, "Photography? It is the shortest route from one eye to another. . . . It permits us to explain the world from nation to nation and thus from man to man, the better to know ourselves. Good documents are not produced solely by the application of technical rules but by the vision of the photographer, the freshness of his imagination, his manner and outlook on the world. The danger in pictures is a tendency to imitate. Too often photographers treat all their subjects in a style which they have discovered in the work of another, instead of inventing their own ideas. They borrow a personality instead of developing their own. Each photograph should be seen as a new problem, realized by a new solution. Too many picture hunters going to the zoo on Sunday finally stop to photograph monkeys. My conception is inverse. I will join the monkeys and photograph the visitors!"



JOHN CRAVEN



HENRI CARTIER-BRESSON







LUCIEN LORELLE

### EIGHT FRENCH PHOTOGRAPHERS

Cartier-Bresson is better known than these other photographers through his work for American publications. He says, "Through the act of living the discovery of one's self is made simultaneously with the discovery of the outside world and there is a reciprocal relationship between these worlds which, in the long run, form only one. Our action can alter the world just as the world can change us."

LORELLE, a member of the *Groupe des XV*, says, "I like to choose my subjects in reaction to those people impose on me (I am a professional). I record luminous vibrations exactly as one records vibrations on a phonograph disk and try to join together imagination, vision and technique."



EIGHT FRENCH PHOTOGRAPHERS

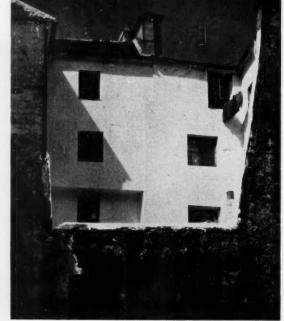
BELZEAUX (page 34), writes Daniel Masclet, is "a very young photo-journalist, a revelation who will go far. This year he was the best reporter being shown at the International Salon of Paris and I have written elsewhere that he will be a genius!"



Izis is a young man whose influence on the French scene is rapidly increasing in importance. He is associated with the publication *Match* and his work is also now on exhibition at the Museum of Modern Art in New York.

DANIEL MASCLET





### EIGHT FRENCH PHOTOGRAPHERS

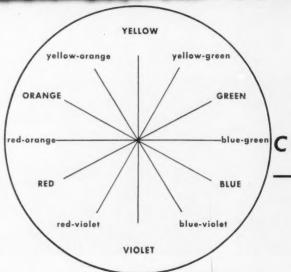
Masclet himself (on these two pages) has had work published in the leading photographic magazines throughout the world. The range of his work is enormous, from portraits to landscapes, from abstractions to a symbolist use of the medium. He says, "I consider photography as the first of the graphic and mechanical arts of our machine era. Its social importance is rapidly eclipsing that of the painter. Certainly! For the vision of modern man, whether he desires it or not, is now entirely conditioned by the image created by the lens: cinema and photography."

While photography is, as Craven says, a means of communication between men of diverse nationalities, a portfolio such as this makes us aware of the national differences of outlook and temperament. Such portfolios, too, can make photographers look again at their own work and compare it with the solutions to similar problems made by photographers working under very different conditions and within the framework of different backgrounds. These differences may widen our outlook.

DANIEL MASCLET

DANIEL MASCLET





### COLOR TRANSPARENCY

### COMPLEMENTARY COLORS

WHEN simple precautions are taken, overall and local color corrections on deficient color transparencies can be made with no risk at all and at comparatively little cost. The simple methods are as follows.

First, when an unpleasant color effect is noticed in the color slide of a larger transparency, learn to analyze just what shade or hue the offending color is. Generally it will be blue, green or a bluish-green. Then give the transparency a bath in a small dye tray containing a somewhat dilute solution of a watercolor dye that is the exact complement in color of the offending tinge. The color complement to be used will be discussed later.

Occasionally only part of the transparency needs correcting. The sky might apear too purple or too green or too yellow. The lush foliage may have turned to a metallic blue. This calls for application of the dye colors locally on the base side of the film. A twisted tuft of absorbent cotton, well squeezed out after a brief dip in color of the proper correcting hue, can be swiftly rubbed over the area needing correction. If the color is too strong in the cotton it may streak such light areas as skies. It is much better to make several applications of dilute or weak color.

Where tiny details are encountered that need color correction or color addition to increase the brilliance, the dye-colors are best applied by a fine watercolor brush.

Concerning the dyes, themselves, there are available transparent watercolors that are dyes of many hues and shades which are suitable for use on color films. The primary colored dyes used in dye-transfer printing may be mixed and blended as desired. In many photographic supply stores are booklets with pages coated with highly soluble brillant colors. Merely tear off a small piece of the proper color page and place it in a small container

of water. You then have a solution of color ready for use. The paper base support should be removed from the water after a few minutes because the paper fibers might begin to work loose into the solution. Eastman Kodak supplies a color booklet of this type.

Available in a wide range of colors are sets and individual bottles of liquid concentrated watercolors sold in artists' supply stores. These come in small sizes from one-half ounce up and some have a convenient dropper top attached. These colors are highly transparent and are extremely effective. The best known are the Dr. Martin's Dyes, Luma colors, and Webster Photocolors.

In addition to the colors themselves a retouching stand or a sturdy transparency viewer (not a projector) is needed. The latter can serve as a support and easel while you work on the film. This can be as simple as a piece of opal glass laid across a support with a light underneath. A contact printer can be used provided care is taken so that only the glass gets wet. Generally a slight slope is desirable to avoid neck strain. Most retouchers prefer the bluish type of electric bulb sold as "daylight" (it is very easy on the eyes).

An ordinary mazda bulb can also be used but may appear a trifle warm in color. Fluorescent lighting is not too satisfactory because of the incomplete range of colors found in any one type of tube. However, there is one exception to this. The "photocolor" tube made by General Electric, when used with special plastic filter covers supplied by Eastman Kodak, gives excellent color transmission. The Way Viewer for transparencies is also professionally recognized for its fine color quality.

In addition to the retouching easel, a retoucher's palette will be needed. You can purchase a fine ceramic or less costly plastic palette that serves just as well and is not so likely to crack or break. The artists' supply

### CORRECTION WITH WATERCOLOR DYES

**Text by Nick Dudley** 

stores carry white enameled metal palettes used by watercolorists. The plastic egg tray (white or transparent) designed for refrigerator use can be found in neighborhood hardware or Woolworth type store. Do not use aluminum.

A small supply of absorbent cotton, preferably long fiber, will serve both as a blotting agent and a color applicator. Any colorless lintless blotters will prove useful. Flexichrome blotters are excellent.

Ammonia and Clorox will prove useful in eliminating or minimizing color applications that are too strong or have run over into the wrong areas. A weak solution of acetic acid, similar in strength to a fresh shortstop bath can be used to "fix" the colors permanently in the gelatine coating of the film base support. The acid bath also serves to clean all fingermarks and handling-dirt from transparency while toughening or tanning it at the same time.

As mentioned in the beginning of this article, a fine sable watercolor brush large enough to hold a good supply of color and still come to a fine point is extremely useful. Sizes three to eight may be used. The larger size is preferable since it will not dry out soon when working over the warm, lighted easel. However, a less costly camel's hair brush will serve if it comes to a fine point. Several retouchers prefer the inexpensive Chinese bamboo writing brushes, which when wet are soft and pliable and have fine resilience. Most print spotting brushes are too small and do not hold enough color for transparency work.

Ektachrome and Ansco Color sheet films accept color readily on the base side. Kodachrome sheet film, now nearly extinct, frequently accepts color application better on the emulsion side. Kodachrome 35mm slides are usually lacquered when received from the processing plant. This lacquer must be removed even though it is generally only on the emulsion side of the film. A little carbon tetrachloride or Kodak Film Cleaner on a small twist of cotton will probably remove the protective lacquer coating. A gentle rubbing should be all that is needed. If this fails, a two or five percent solution of sodium carbonate will do the trick. However, in this case, keep any swabbing very gentle indeed as the emulsion will get soft if soaked very long.

The larger sizes of color rollfilm should be handled like sheet film with the color applied on the base or support side of the film. If the emulsion gets wet on Ektachrome it will immediately "frost" over, delaying any further retouching until completely dry. Ansco Color film, however, occasionally accepts colors better and more smoothly on the emulsion side. The base side should always be tried first.

Frequently, as in the case of a flat gray sky, or where pastel colors are washed out by overexposure, a direct application of the needed color will supply all the correction needed. About a tablespoon of dilute, but not pale, color will be needed. When a few square inches or more are to be covered with the color use a folded-over twist of absorbent cotton which, when wet, is about the thickness of your small finger, and half the length. This is after most of the dipped up color has been squeezed back into the palette, of course. Work swiftly and cover the entire area boldly and smoothly, rubbing the swab of cotton back and forth with long strokes. When adding colors to the sky, keep all the strokes horizontal, parallel to the skyline. Any sections missed should be blended in by a much smaller, well-squeezed-out cotton swab. A brush may be used for small enclosed areas like a patch of sky seen through a hole in the tree branches.

The brush should be used not only for all small areas







Photography by Robert Sosenko

Materials needed for transparency retouching are basically simple. Grouped at the top of the page are bottles of three of the available brands of dye colors, a palette, cotton and brushes. Small details are corrected (just above) with a brush, while larger areas are changed in color using a tuft of cotton (left) with another swab of wet cotton ready to blot off excess colors.

but also for large areas where the texture and pattern of the subject is rough and does not require smooth blending. A rocky foreground, or foliage patches will best be handled by brush. In cases like this, apply the brush very wet with the color solution all over the needed area, working it longest where the most color is needed. Immediately take up all surplus liquid from the transparency by using as a blotter a piece of cotton that has been wet in water and well squeezed out. A rapid application of a lintless blotter will also prevent puddling. Have it ready in your other hand so that no time will be lost. Don't change hands—use both of them. Pat, don't rub with the blotter or cotton. Remove it immediately before the area gets sticky.

Occasionally, slight resistance to the color will be encountered due to the hardeners used during the processing of the film. Many color retouchers find that a small twist of cotton moistened in the mouth and then rubbed on the area to be colored makes color acceptance easier.

Do not use a wetting agent in the water. The colors will bleed outside the wanted areas if you do. Incidentally, the saliva moistened cotton usually has enough acid in it to tend to set the dyes. This is useful even when being used to absorb excess liquid color from the transparency.

Most of the time slight and simple changes in the coloring of the film will make enormous improvement. It is now necessary to discuss complementary colors and their effects in making corrections.

A complementary color is a color that is the exact opposite of another color. Theoretically, when the two opposites are mixed together, they form a neutral gray. For instance, orange and blue, yellow and violet, and red and green are a few examples of complementary colors. This holds true with most paints.

However, the offending color in a faulty transparency is not always obvious. It must be detected in order to make the correction by applying a wash of its complementary color.

When a sallow complexion is encountered, regardless of whether it is due to race, illness, lighting, bad film or any other reason, if it appears yellowish, a light wash of violet will ruddy up the skin to the degree of health desirable. Do it lightly and gradually until experienced, otherwise a too florid blushing effect will result. In a

closeup view of a face, avoid going over the teeth and eyes, unless they are yellowish too. Don't forget the hands and neck, if needed.

Colors at opposing ends of the lines are direct complements and will tend to form a neutral gray as they are mixed together. For instance, as blue is added to its complement, orange, it turns the pure orange color brownish and the mixture gradually becomes grayer and grayer until equal amounts of the blue and orange form a completely neutral gray.

For practical purposes, we will consider the large capitalized colors in the color wheel as primary colors. Even though they can all be mixed (except yellow) by combining two other colors.

Occasionally a yellowish tinge is noted in snow scenes made on a cloudy day or in some object that is supposed to be pearly white. An extremely pale violet, preferably with a touch of blue added making the correcting color more of a blue-violet or purple, will work just like a bit of bluing in the laundry. It will make the whites whiter! We conventionally accept bluish whites as the lightest whites. Here again, if a large uniform area on the color transparency is to be treated, use a twist of absorbent cotton dipped in the somewhat diluted violet. Squeeze out most of the color so there is no danger of a puddle stain forming.

If a face is too ruddy, excess redness can be toned down by applying a light green tint with a watercolor brush. Blot immediately. An alternate but infinitely more risky and complicated correction would be to bleach the magenta layer of the film. Not only would this affect all the magenta in the entire scene, but since it is nearly impossible to judge except by trial and error, it is at best a bad gamble. Furthermore, magenta chemically bleached frequently regenerates itself back to nearly full strength.

Excessive blueness, particularly in films that are slightly darker than normal, can safely be bleached without affecting the other main colors. The color film manufacturer's own recommendations for bleaching formula and procedure should be followed.

However, here too, soaking in a small tray containing orange dye somewhat diluted will neutralize the general overall coldness.

The reason for not giving the concentration of dye

in percentages or some other specific figure of dilution is that since the final results are visual anyway, not statistical, you can do as follows: Dip the transparency in a smooth swift motion right into the color solution and while holding it by a corner, keep agitating for a few moments. Then rinse briefly in a tray of fresh clean cool water and inspect over a light-box or transparency viewer. If too much color has been absorbed, continued rinsing will eliminate some of the hue. If very much color has been absorbed, a little ammonia in the tray of rinse water will float out the added color.

However, most of the time the transparency has to go back into the color dye tray for a longer immersion.

This method is not as practical with Ektachrome since it becomes nearly opaque when wet and cannot be judged. It will work with both Kodachrome and Ansco Color. If, due to age, or excessive hardening, the tray dipping color fails to hold on the film and appears to merely drain off, a surface treating medium must be used. The film should be dried, then Nonpareil solution swabbed evenly all over the base side. This inexpensive solution is available where photo coloring equipment and artists' supplies are sold. It is usually intended for treating glossy and matte photo prints so that they will accept coloring or retouching. Sometimes a little Nonpareil, or similar solution, can be added to the palette containing the dyes.

Most sheet color films need no treatment before dyeing. In fact, very often when only a very pale overall tint is desired, the film should be thoroughly wet with water before being placed in the color dye tray.

Do not use any household or other bleaches to remove excess or incorrectly applied colors where there is the slightest danger of touching the emulsion side of the film. Even when dilute, there is a chance of removing the yellow and magenta layers of the color film. On the rare occasion when a color applied in error must be completely removed, use the Clorox or other bleach on a twisted swab of cotton. Watercolor brushes, excepting the Chinese fiber brushes, will be ruined by the bleaching solution. Precaution: it is advisable to follow any color bleaching with a quick swabbing of dilute acetic acid to reharden the gelatine-coated base support of the film. The bleach is mainly useful in clearing out highlights that have inadvertently become tinted.

One novel use of Clorox is its ability to turn brown eyes blue. Despite previous warnings about applying bleaches to the emulsion side, a little dilute Clorox carefully applied on the emulsion side to the brown iris (or black) of the eye, magically will wipe away the top color layers leaving a bright blue eye. This should be immediately and gently swabbed with dilute acetic acid.

If the blue is too brilliant, by following the neutralizing procedure of color mixing, apply a little weak orange sufficient to gray down the bright blue. If green eyes are desired, a little yellow can be added to turn the blue into green. Naturally this procedure is not restricted to eyes, but is too risky to chance on larger areas.

Colors may be mixed by subsequent washes of different colors on the transparency or by mixing first in the palette. When blending in the palette, drop by drop of the full strength color should be added to about a spoonful of water. Start with the predominant color needed. Modify by adding cooler or warmer colors as needed.

Blue is warmed by adding violet or a tiny amount of red. It is cooled by adding green or a little yellow.

Green is warmed into olive tones by adding orange.

It becomes turquoise and is cooled by adding blue.

Yellow is cooled into chartreuse by adding green. It is warmed toward orange by adding red.

Red is cooled by adding blue—it becomes magenta and eventually violet.

It is warmed toward vermillion by adding orange or yellow.

Added suggestions:

A pale green wash applied with a well-wetted brush to the whites of the eyes will tone down any redness acquired by bright glaring light on the subject. This, applied to the base of the film (not the subject), should have a few more definite fine strokes of green with a well-pointed, nearly dry brush to any visible irritated veins or capillaries.

A primary red, cooled down with a little blue into a magenta hue, will restore the vivid lipstick red to lips that appear orange or dull in a color photograph.

There is enough yellow in brown dye to give a pleasing natural effect to brunette hair that gleams purplish gray. Don't put too much color in the highlights or the hair will lose some of its lustre.

When grass or foliage appears brownish add green that has a little yellow mixed into it. When foliage is too bluish add yellow to restore the sunny brightness of nature.

Try some touches of bright primary colors to neon signs and other colored lights appearing in night scenes.

When water scenes appear gray and dull add some blue-green, applied with a cotton swab to avoid definite color streaks.

Use all supplementary colors on film very sparingly. It is far better to keep the results subtle by too little color than to spoil the naturalness by excessive painting.

### OPTICS FOR THE PHOTOGRAPHER

by E. Wildi

(Continued from April)

### **VI Lens Faults**

Images formed by a single lens suffer considerably from defects because of the lens aberrations. Aberrations are not caused by any faulty construction of a lens, but are consequences of the laws of refractions at spherical surfaces.

The aim of the lens designer is to reduce these aberrations to negligible amounts in an endeavor to receive a sharp, distortion-free image. The means by which this can be accomplished are:

Increasing number of lens elements.
Using different types of optical glass.
Changing curves of the various elements.
Changing thickness of the lens elements.
Changing distance between lens elements.
Separating or combining elements into one unit.
Placing the diaphragm in proper position.

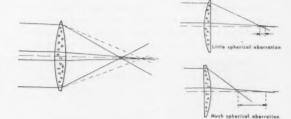
Aberrations caused by the fact that normal light is composed of various colors are called *chromatic aberrations*. The others which arise also in monochromatic light are the *monochromatic aberrations*.

### A. Monochromatic Aberrations

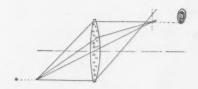
- 1. Spherical aberration. Rays incident on the lens near its rim are imaged at a distance closer to the lens than rays incident near the axis of the lens. There is no plane where a sharp image of a point is formed; the result is a blurred circle. This diffusion of the image is found in the center as well as on the edge and grows with the aperture of the lens. Spherical aberration can be corrected by proper choice of radii of curvature of the lens elements.
- 2. Coma is similar to spherical aberration, but affects rays coming from points outside the axis only, while spherical aberration relates to points on the axis too. Coma is often formed only on the edge of the picture. The obtained comet-shaped figure (term "coma") results from the failure of the lens to image rays passing through different zones of the lens at the same point.

Coma can be corrected by proper choice of glass and radii of lens curvatures, and by inserting a diaphragm at the proper point. An objective corrected for spherical aberration and coma is called *aplantic lens*.

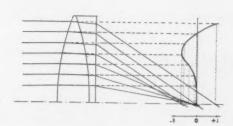
3. Astigmatism also affects the light rays from object points outside the lens axis and is found on the edge of



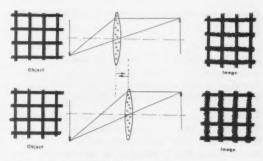
The degree of spherical aberration depends upon the shape of the lens.



The result of coma is a comet-shaped image of a point.



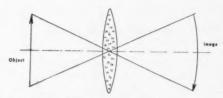
Illustrating how the optical correction curves of a lens are obtained.



A lens with astigmatism does not form a sharp image of horizontal and vertical lines at the same point.

the picture. The two perpendicular lines of a cross are imaged sharp at two different distances from the lens called *primary image* and *secondary image*. Each one can be obtained sharp, but not both at the same time. Astigmatism grows with the aperture and the size of the field. Unsharp edges of a picture usually indicate that coma or astigmatism is present. Astigmatism can be corrected by special types of glass and by right position of the diaphragm. Such an objective is called *Anastigmat*.

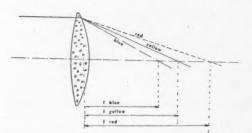
4. Curvature of Field. This aberration is explained by the same phenomena that cause astigmatism. The surface



The surface of best focus is not a flat plane.



Distortion rise from variation of magnification with axial distance.



Chromatic aberration means separation of white light into various colors.

of best focus, which is in between the primary and secondary image, is not a flat plane but a curved surface. Curvature of field is corrected by proper choice of glass and also by right position of the diaphragm.

5. Distortion is an aberration arising not from lack of sharpness but from the variation of magnification with axial distance. If the magnification on the outside of the field is greater than in the center, we refer to it as "pincushion" distortion. The opposite effect is called "barrel" distortion. Change of aperture has no effect upon distortion in a single lens. Thus placing the diaphragm be-

fore the lens will result in barrel distortion; pincushion being obtained when diaphragm is behind the lens.

### **B.** Chromatic Aberrations

We have found that the light passing through a prism is dispersed into a spectrum. The same effect is found with a lens. Blue light is bent more than red light which means that the focal length of a lens is different for the various colors. This variation of image distance is called axial or longitudinal chromatic aberration. In addition, the images obtained by the various colors are of different sizes, a variation called lateral chromatic aberration. Chromatic aberration is not affected by changing the aperture, but can be corrected by combining positive and negative elements. This is called achromat.

### VII COATING

Most lenses now manufactured are coated. Whenever light meets a glass surface a small portion of about five percent is lost by reflection. Many modern objectives, like the Switar, have eight or more such surfaces which would result in a loss of light of about 40 percent. Besides the loss of speed, the reflected light is likely to produce a distorting halo around the outlines of highly contrasted images.

The lens elements of coated objectives bear a thin layer of a fluoride, the refractive index of which is between the one of air = 1 and the one of glass = 1.45-1.7. If the thickness of this layer is  $\frac{1}{4}$  of the wave length of light, the troublesome reflections can be reduced to a fraction of one percent. The explanation is found in the law of interference, an optical phenomenon.

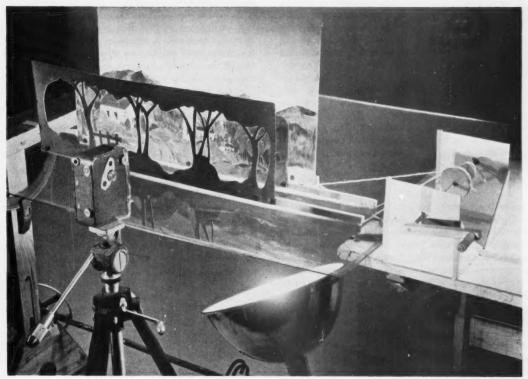
As the wave length of light is dependent upon its color, it is possible to eliminate the reflections completely only for light of one particular wave length. This is usually done for the yellow-green portion of the spectrum. Blue and red light is still reflected which explains the purple appearance of coated surfaces. However, a deep blue color does not mean a superior coating, but merely that the lenses have been treated longer. Coated lenses increase the contrast and brilliance of the pictures.

### VIII THE CARE OF LENSES

- 1. Protect the lenses from dust and dirt.
- 2. Prevent any fingermarks on the glass surfaces.
- 3. Do not store lenses in hot or humid places.
- 4. If the lens requires repair, return it to its manufacturer. Do not attempt to take it apart yourself for repair.
- The cleaning should be accomplished as follows:(a) First remove all dust and dirt from the lens sur-
  - (a) First remove all dust and dirt from the lens surface with a soft camel's hair brush.(b) If this procedure fails to thoroughly clean the
  - (b) If this procedure fails to thoroughly clean the lens, wipe the surface gently with a chamois or a wad of soft, well-washed linen. Breathing on the lens, not using lens cleaner, is recommended for removing fingermarks.
- 6. Never clean lenses more than absolutely necessary.
- 7. Do not use acid, alcohol or similar liquids.

### TABLE TOP FOR TOP TRANSITION

Text by Russell C. Holslag



Photography by Robert Sosenko

Animated transition and title scenes are possible with a little ingenuity. The author suggests a number of devices which will snap up your footage immediately.

When inclement weather surrounds us and it is uncomfortable to photograph outdoors, more movie cameras than still equipment are put on shelves. Somehow or other, recording the activities of indoor subjects seems less appealing to the movie maker who may have overlooked the potential in fun and experience of table top movies. Such miniature set technique is neither difficult nor expensive.

### Lighting

First, regarding lighting, a miniature set may be fully illuminated from any direction and in adequate quantity without danger of blowing fuses. Probably the most outstanding difference between professional and amateur movie lighting is the use of overhead light. Most professional interior sets have no visible ceilings and from this "roofless interior" there descends on the set that generous quantity of illumination so effective in creating the bright interiors which abound on the theater screen.

Of course this general overhead illumination is nicely diffused so that pools of shadow will not be cast around the players. Added to this pervasive light are the special "effects"—brilliant rim—black top—or side-lighting—so constantly used to enhance interior movie scenes.

All these are fundamentals in set dressing and the home cameraman may have difficulty in similarly arranging his lights (such as getting them up high enough for overhead backlighting, for example). With his miniature set, however, he can experiment with these and similar effects to his heart's content and, in so doing, produce on film all the variety which is made possible by developing a movie's theme.

### Table Top "Sets"

The next consideration in table top movies is the working out of a desirable miniature "set" on the table top. We might start with a "room" of three walls, the fourth wall being considered transparent which, in the tradition of the theater, affords a clear view to the camera's eye. Whether the set has three walls or two, or is only a backdrop, the illusion is the same

To dress the set and to make it a miniature of actual conditions it could be easily proportioned to accommodate toy plastic furniture, a popular feature of children's toy counters everywhere. Available in many designs, such furniture has the additional advantage of having three dimensions. Many other suitable miniature materials can be found, too, and of course the sets need not be confined to interiors. The potential ideas that can be applied to such a project are limitless. This is one of its fascinations! Macbeth's witches' heath or Aladdin's cave are equally possible to reconstruct. In each case we try to control the lighting so that the effect will be as near an imitation of its natural counterpart as can be managed.

Having arranged the general set one may legitimately say, "Well, I am all prepared for my lighting tryouts. But it is going to be a movie after all, so where will my movement come from?"

At this stage I do not suggest that it is necessary to buy small dolls or figurines to be animated by stop motion. Rather, we can utilize action related to stop motion but of a type which will reveal the possibilities in table top movie photography different from the ordinary.

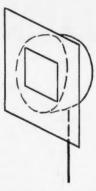
This fundamental difference stems from the fact that, in a movie, each scene should have action related to the

scenes before and after. Although a table top movie shot in itself may not possess any complicated or astounding animation, it may act as a link to fill out and rejuvenate existing film.

### **Mechanical Arrangements**

Camera movement. In considering this it is particularly pertinent to recollect that in a movie not all the movement necessarily originates on the set. Movement of the camera itself can be very effective and, in fact, is one of the attributes exclusive to movie presentation. Since, in table top setups of this nature, distances are relatively small, either the camera may be moved toward or away from the set, or the set moved with respect to the camera. For instance, it is quite possible to revolve the entire set around a horizontal axis, giving the impression that the camera is circling the scene in an airplane.

Lighting techniques. The few lighting units that will need to be used ought to be so masked as to more genuinely reproduce the impression of their full-sized prototypes on a professional set. This can be done by cutting round or rectangular holes in fairly heavy cardboard and supporting these in front of the regular light-reflecting unit. In this step it is best to leave a ventilating space between the unit and the cardboard to avoid producing an enclosed "oven" that may cause the card-



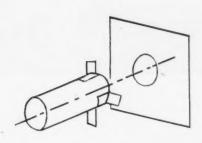
In order for table-top animation to resemble the lighting for actual scenes, it is necessary to cut down the size of light sources and shield them from the camera. This is one type of shield which is useful.

board to char. For spotlight effects, mailing tubes of various diameters may be used in conjunction with heavy cardboard to produce "snoots."

Lighting arrangement is followed out in the same relative proportions as in a life-size set (except that on the miniature set one can be as prodigal as Hollywood). For an interior we may start with overall flood or front lighting. No special directional effect is necessary except that it is generally most satisfactory to have an overhead light source at an angle of about 45° or slightly more. One unit over the camera, or one above and on each side of the set will give the general flood lighting necessary to photograph the table top details.

At this point it is wise to take an exposure reading since most or all of the auxiliary lighting will consist of rim, back or occasional spot lighting and will hardly affect the principal exposure. Naturally, one should be careful to place the lights so that some local or accidental glare will not be reflected from a shiny surface to give a misplaced accent in the picture. The camera should be on a tripod and solidly placed in relation to the scene. Then a peek through the finder will slow up any offensive reflections.

If the set is small, a reflected light meter should not be brought in so close that a shadow is cast when taking an exposure. Incident light meters are not susceptible to this error.



Light control for small table-top animation is best controlled by a liberal use of snoots, gobos and shields on the light sources. Here a roll of heavy paper makes a snoot. Keep this away from the light lest it char.

Depth of field, which plays a part in smaller setups, must be watched. However, since light can be plentiful there is no reason why a lack of sharpness from front to back of the set should be noticeable. Small stops can be used and the light poured on without fear of complaint from the subject. An aid to this desirable quality of imitation of the depth of field in a larger set is the use of the wide angle lens. This greatly increases the depth of field and permits the photographer to use somewhat less light.

Having achieved the overall basic lighting and taken the exposure we can consider "effect" lighting. To imitate a Hollywood set in all its glamor requires flooding the objects in the set with light from the rear. This gives the prized "backlighting," which picks out actors or objects from the background. This is easy to do in our miniature set.

It is almost impossible to pour on too much light from the back in such an arrangement as this since its function is not to improve the overall exposure but to outline objects with rims of light. The main caution is to prevent direct light from the source from reaching the camera lens, with accompanying danger of flare. This easily can be done by making use of shields—"widows," "gobos," "barn doors"—held at strategic points. All can be extemporized much more easily in miniature form.

Motion. A principle in creating natural motion for miniature movies is this: the force employed to set any miniature object in motion is usually many times greater than is actually needed and certainly is in much greater proportion than the forces which normally act to move natural objects in reality. Thus, the usual force applied to set a miniature object in motion from a position of rest will seem too quick and too jerky when it is magnified to simulate life size on the screen. An example of this principle is the use of a small tub of water to simulate the sea. No matter how lifelike a model of a ship riding on such a sea would seem, the movement of the water will be miniature because the huge ponderous movement of an actual wave is not imitated. For this reason, a slow motion is usually adopted. The principle is clear. Duplicate as far as possible the slow and ponderous movements that result when more weighty objects are set in motion in real life.

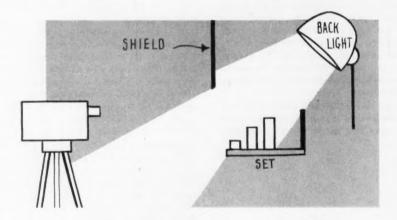
Animation. The kinds of motion possible are unlimited when animation is considered. However, there are equally unbounded possibilities in the movie miniature without animation. By animation we mean the taking of one frame or picture at a time, slightly moving each object along a pre-arranged path between each exposure.

**Titles.** Even the simplest titles can be given an interesting variety of motion which will serve to introduce a film in a way that is particularly appropriate for a movie. As a simple starting point, suppose we have a

film of miscellaneous scenes around home and it occurs to us to dress it up with a title "At Home." We start with the idea of using cut-out letters against a color background. This at least is individual because we can choose our background and arrangement of letters. However, it lacks motion. We split up the letters with space between and tack them to a couple of battens to make two nonsense words, "Ta Ohem." Shoved slowly together from opposite sides of the frame the two battens reach their places and spell out the title.

luminating the house turned off. A dark silhouette will then be formed against the sky.

While discussing imparting scene movement by the motion of light sources while one camera is rolling, we must not overlook the extensive variety of effects that can be had simply by moving the lights in relation to raised or cut out title letters against a background. Such letters are obtainable in many sizes and prices. The slow movement of light beams in relation to solid objects can be fascinating and has been the sole theme of several "ab-



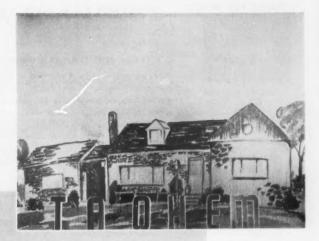
When illuminating a small set be sure to keep any direct light from striking the camera lens. This can be accomplished by using a snoot or by suspending a shield (above) so that the light is confined to the actual table-top.

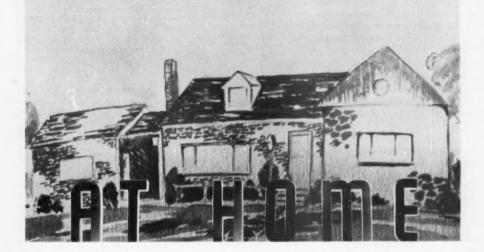
If we want to be more elaborate such foreground action may go on against a table top miniature representing our home. This can be anything from a simple cardboard cut out in two planes to a full-fledged model, or a backdrop of plain white cardboard, illuminated with colored lights, may be placed behind the model (it is better if the background is slightly out of focus). Colored gelatine for the purpose is available at art and theatrical stores. Color may be gradually merged from white light to deep blue in the background and the front lights il-

stract" movies. These are very effective in color.

Connecting sequences will serve to introduce refreshing variety. As an example: much that is symbolic in a simple fashion can be entrusted to the miniature set-up and will serve to fill gaps that otherwise would be noticeable in a general film. Two of the most needed links in many amateur films are shots that will denote both passage of time and distance covered. Timeworn devices to show this are the clock with moving hands and closeups of turning automobile wheels.

Tricky arrangements of moving letters are not difficult if they are planned ahead of time. The method of reducing this "scramble" (right) to a correctly-reading caption is described in the article.





Although these are both acceptable methods, a new approach is usually worthwhile. To establish the fact that it is early morning, for example, all that is needed is a miniature set with a cut out line of silhouetted tree tops or buildings, and a white cardboard set a few inches to the rear. The light on the backdrop behind the trees is gradually brought up. No complicated dimmers are needed, The light is just advanced closer and closer until the desired brilliance is reached. This works both in black and white and color.

Colored gelatine may be used to indicate sunsets or a red sun in the morning. Lengthening shadows in a room is a good experiment to try also. The room, a two or three sided miniature, has windows cut in the walls with a razor blade. It should not be too difficult to pick up a camera shot of a friend's profile which can be traced on a sheet of black paper, cut out and treated as an animated silhouette.

Multiple plane movement may be described simply as the rather striking appearance of objects as they are seen Other background ideas as suggested in this article are for illuminating windows (right) with a light directed from below against a 45° reflector. With such a device, illuminated house windows and the like may be suggested.

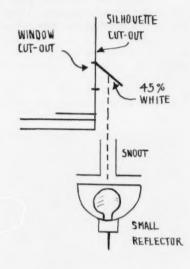
when viewed from the window of a moving train. That is, objects nearest the observer seem to flit by faster; those in the middle distance seem to fall behind more slowly, while those in the far distance seem to be standing still. The effect confers a depth of perception which is very noticeable, and has been used often to add realism to screen cartoons. No complicated arrangement is necessary; it is a re-creation that only a movie camera can produce.

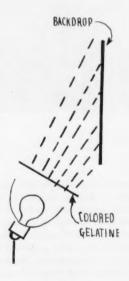
Three simple cut outs, one each for the background, middle distance and foreground, are all that are necessary. These can be set up pretty nearly in one plane—one sliding on the other—but if each is separated by a slight distance, the lighting may be better arranged. Naturally, we don't want one layer to cast shadows upon the scene behind it. An interesting device is to arrange for part of the illumination to come from below which may be done by supporting and sliding the material on a glass base. It is quite effective to arrange for the foreground to appear in silhouette. Since all planes of the scene should move slowly and smoothly at different speeds it is advisable to have an arrangement for winding in order to facilitate the control of relative movement.

Though a little more complicated to manage, such movie dioramas can be highly effective. There is no reason why those whose tastes run to abstract design should not use this device to animate moving planes simply as sheer design. What Leger or Calder or other modern artists have done will furnish ideas for multiple plane movement. Double or multiple exposures in table top set ups may feature moving design units in multiple planes combined with movement toward or away from the camera.

Avoiding expensive techniques and complicated Hollywood equipment these table top movie *suggestions* should encourage many more table top movie *ideas*.

With color film, there are no end of effects which may be obtained by the use of theatrical gelatines. These are available in a wide range of hues and enable the set or portions of it to be illuminated with colored light (right).





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"Pattern Motif 283," Axel Bahnsen, Yellow Springs, Ohio. Exhibition print on Kodabromide Paper F (glossy, pure white stock). Reproduction print on Kodab. Medalist Paper F. The original prints, of course, possess a quality and tonal range that cannot be fully retained in ink-and halftone on high-speed printing presses. For the basis of Mr. Bahnsen's exhibition choice, see facing page.

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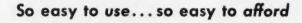
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ONE OF OUR READERS is asking us how to get quality into his prints. We have a dim recollection of having divulged this secret to him once. But perhaps it was another fellow, and he wasn't with us then. Anyhow, if he doesn't know the trick there is nothing more important for him to learn, so we are going to give him the works.

Looking back on many years of constant advance in photographic technique, nothing is more noticeable than the steady improvement in print quality. Practically all photographs are made now upon developing-out paper but they are as much better looking than the earliest specimens of this process as we are an improvement upon the appearance of our Cro-Magnon ancestors. While it is quite all right for operators to take a little pat on the back for this accomplishment, we have to admit that a great part of it is due to the manufacturer for the research and money that he has put into his product in the intervening years. But of course with the finest material in the world some people can make a mess of a job and it is amazing how many people still do that in making prints.

Photography underwent what was perhaps its most radical change about fifty years ago when we went from large to small cameras. The portability of small cameras, their slight initial cost (in those days) and the inexpensiveness of operating them, gave photography to the masses. Rollfilm and "gaslight" paper started this movement in the '90's, but it was not until the process of enlargement gave prints comparable in size and quality to the contact prints of the professionals that the movement really began to roll.

Up to this time all self-respecting prints had been made by contact upon platinum paper before that metal had climbed into the millionaire class. These prints were famed, and still are, for their great physical beauty but the papers in use today are capable of giving prints that compare favorably in every respect with platinum paper. That the majority of them do not is attributable to ignorance or carelessness upon the part of the operator. Platinum being a printing-out process, you could see what you were doing and it was so simple that you could hardly go wrong.

With the new enlarging papers you could not watch and see when they were printed enough. The paper was still blank when you gave it what you thought, or fondly hoped, was correct exposure. The result was anxious moments as you watched it come up in the developer and then you usually snatched it out quickly before it turned black all over or left it in so long trying to coax out a decent amount of detail that the paper was shrouded in a somber fog. It is amazing that after all we have learned about the process so many people still handle their paper in essentially this same haphazard manner. It cannot

### POP SEZ ...

Franklin I. Jordan, FPSA, FRPS



be stressed too strongly that the basic requirement for quality prints is the correct correlation of exposure and development.

We start with two variables which play against each other. The longer the exposure, the shorter must be the development, and the result depends upon the judgment of the operator. Inevitably, poor judgment results in poor prints. These run the gamut from really bad ones to just ordinary prints which yet fall far short of the scintillating beauty of which the process is capable.

This playing both ends against the middle will never get anyone anywhere. Scientists long ago learned that the easiest way to simplify a problem was to eliminate as many variables as possible from it. We are lucky that there are only two variables in our problem. Standardize one of them and our problem disappears entirely and everything is under absolute control. Standardize the development and then all we have to do is to give tentative exposures until we find the one that gives the finest-looking print with that development.

But it takes a certain amount of intelligence even to standardize the development. Since the manufacturer in recent years has furnished a formula for every brand of his paper and tells how many minutes to use it at a given temperature, some folks fail to see where any intelligence is required, but that is simple. The intelligence consists in having wit enough to do what the manufacturer tells you to do. You'd be surprised at the number of people who blunder through life without even this modicum of intelligence. It is commonplace in photography for many people to think that some patent nostrum or some concoction of their own devising will give better results than the formula recommended by the manufacturer after exhaustive research in his laboratories. Try his formula first and see what a good print looks like on his paper and then compare it with your pet theories if you want to.

The tentative exposures require great care. Standard procedure is by successive masking on a strip of paper to give a series of exposures progressing in geometric ratio, as 5, 10, 20, 40 seconds. The range within which correct exposure will fall depends upon the density of the negative, strength of enlarging light, degree of enlargement, stop used, speed of paper and strength of developer. If unfamiliar with several of these factors, correct exposure

may not come within the range that you first try, but it will indicate another test strip with exposures longer or shorter than the first. When correct exposure obviously falls within two of the numbers in your series you have your objective surrounded and all you have to do is to run another series between those two figures. This should be run in arithmetical ratio to narrow the jumps. For example, if the first test shows the correct exposure to be between 20 and 40 seconds run the next test strip 24, 28, 32 and 36 seconds and one of them will probably be nearly enough correct so that you can guess the difference.

Each exposure on a test strip being from a different section of the negative, it is sometimes difficult to compare them critically. A better way is to make a circular mask with one quadrant cut out and use a square piece of paper under it, rotating the paper between exposures so that all the tests are made from the same part of the negative which should preferably be at the center of interest.

An electric timer is worthwhile to eliminate the human error when making the comparative exposures and then when the correct time has been established you can be sure of duplicating it exactly by simply pushing a button.

The developer is not standardized unless its temperature is kept constant. It will not stay long at 68F with your hands at 98F in it because they act like immersion heaters. Use tongs and keep your hands out of it. Your body at 30 degrees warmer than room temperature acts like a radiator and heats up the darkroom and the developer with it. Check the temperature occasionally if you want consistent results.

It takes a lot of experience to look at a wet print under darkroom light and know what its going to look like when dry and in full light. Give your tests a brief bite in the hypo, a short rinse under running water, mop off surface moisture, quick-dry them with heat and then in full light see what you have.

Does all this sound like a lot of bother? Sure it is, and there is no need of going through it all unless you really want a good print. There are many tricks in operation that add to the quality of prints and we would be glad to talk about them some time if you are interested, but all of them put together will not give you a quality print unless you have first correctly correlated exposure and development.



### FOR MEMBERS ONLY

by Victor H. Scales, Hon PSA

FOR MEMBERS ONLY is dedicated to the news, views and activities of photographic organizations, with special emphasis upon camera clubs and their operational problems.

Photographic organizations are requested to direct their bulletins, house organs and releases regularly to: FOR MEMBERS ONLY, American Photography, 136 East 57th St., New York 22, N.Y.

### Planning is Mandatory for Successful Club Project

Sooner or later the camera club experiences a let-down and seeks some purposeful program wherewith to renew its organizational vitality. In recent years resort has been made to "club projects" of various types with somewhat divergent success.

The chief difficulty appears to be that projects require quite as much planning and direction (in other words, management) as does the club's normal program. Projects afford no escape from reality or responsibility. In fact, they need more of both than does the program of the club which is content to drift.

### **Divided Interest**

Many of the projects seem to encounter difficulty in the form of divided member interest. Some members are highly enthusiastic. Others are mildly interested-and bored. Still others will have none of the project. While the fault here may rest in failure to achieve 100 percent interest when the project starts, camera club management may be pardoned if participation does not attain such a rather terrific percentage. Some members have no suitable camera equipment. Some lack time. And some have other interests. Things happen, enthusiasms change, plans get snafu without anyone or anything being particularly to blame. Obviously here is a management problem of serious proportions, a field for great leadership and an opportunity for experiment in practical and applied administration.

#### Idea has Merit

The camera club project idea seems to have merit. When and where tried, it has been highly productive. If sometimes only temporarily.

However, unless such projects are well-planned, well-directed and carefully thought out in advance they can become diplomatic problems and causes of dissension. The pros and the antis can argue just as bitterly over projects as they can over any other camera club controversies. And when the camera club becomes a debating society it is time to begin worrying about its future welfare.

Clubs contemplating projects are well advised to remember that (1) projects need planning and direction, (2) they can be most successful both in producing useful pictures and in training club members in photography but that (3) 100 percent membership support cannot be expected. In other words, the project is likely to become an additional club activity.

Which probably is what it should be! Camera club members are quick to resent and resist regimentation in any form no matter how good it may be for them. A laying out of a program of pictures which members must take certainly borders upon regimentation. However practical and useful the documentary pictures which a project can produce, there is something to be said for complete freedom of the membership to take and to make any kind of photographs anywhere at any time.

Of course, even such freedom can pall after a time! Sooner or later a club finds that some kind of organization and beneficent regimentation is necessary. And that's likely to be a good time to consider projects!

### Chicago for Posterity

Possibly one of the more active and useful projects of the day is that conducted bointly by the Chicago Area Camera Clubs Association and the Chicago Historical Society.

The purpose is to create a photographic history of the passing scene. In two years the project has produced around 2000 photographs of life as it is lived in the Chicago area. About 1000 have been accepted for preservation.

These photographs reveal the appearance and shape of things as they are—streets,

buildings, people, parks, bathing suits, farm implements, games, parades, business operations and what-not. The pictorialists can be artistic, the documentarians can pump for accuracy; both are acceptable because the major emphasis is on picture content and the representation of life as it is being lived. In effect, these pictures are investments in the future, for their real value will materialize about 100 years from now.

Actually these pictures are finding use long before 2052. It appears that things change pretty fast and pictures made fairly recently already have proved their value.

The project is competitive. Prints are judged for acceptability. There are rewards in the form of modest trophies for clubs and individuals doing outstanding work. The pictures are exhibited from time to time by the Chicago Historical Society. The program is so broad that camera clubs in the vicinity of Chicago may set up their own "home town" projects as part of the overall operation.

Director of the project is Frank E. Rice, 307 North Michigan Ave., Chicago 1, Ill.

#### Chicago in Color

Members of the PSA Color Division residing in Chicago started a somewhat similar project some years ago. They had multiple objectives: proving that color slides can be used for purposes of documentation and proving that documentary pictures can be thoroughly pictorial. This group has not only produced substantially, but has developed a sideline. It has created a set of 50 pilot slides which are available on loan to any camera club contemplating a project. Along with the slides goes a commentary on such projects so that together, slides and lecture comprise a meeting program. The material is available from H. J. Johnson, 2134 West Concord Place, Chicago 47, Ill.

### **Recording New York**

Undoubtedly many clubs throughout the country have undertaken similar or rela-

ted projects with divergent results. An interesting job is that of the Greenwich Village Camera Club of New York. It is making a pictorial social history of the people and places in Greenwich Village which for 300 years has been struggling to maintain a community identity in the heart of a growing city. New York is the subject also of a project of the Manhattan Camera Club of New York. Here emphasis is placed upon the city's people and what they do.

#### Trends of the Times

Camera Club projects, whatever their objectives, certainly are in keeping with the trends of the times. These trends are strongly pictorial, as witness the increasing number of illustrated books now appearing on history. And the comments that, after a few more years of television, reading will be a lost art.

Projects can be helpful to any club as a means of inspiring members to make photographs, more photographs and better photographs. After all, that is one of the larger objectives of every camera club!

### Should Judges be Harsh, Lenient or Impartial?

Few camera club activities cause more distress than those related to the judging, and rating of members' work. Particularly when the work is scored for the season's final competition, and especially when a judge appears to many club members as something less than Solomon.

'Were it possible for camera clubs always to obtain top-flight judges! And if the judges' decisions always transcended human frailty! And did camera club members always accept decisions and scores with good grace! If all these nice things could happen there would be much more happiness and far less distress in camera club circles.

Unfortunately they are not going to happen! Club members are going to have to put up with the same old human judges with the same old human shortcomings. Weeping and wailing and gnashing of teeth—and of camera club contest directors—is going to be heard in the land. Nobody is going to do very much about it. For it is an important question of methodology and of ethics and it leads to another important question.

### What is the Most Desirable Single Attribute of a Judge?

That question, like the judges, has been kicked around in camera clubs for many years. Both will be bones of contention in years ahead. Club members and managements talk endlessly about what they want

in the way of judges and judging, but none seems to come up with any definite answer. Possibly because there isn't any!

Should a judge be severe? Or lenient? Should he merely state his opinion? Should he comment on how and what improvements to make?

Many camera club members suggest that the methodology of judging be adapted to the occasion. For monthly print and slide judgings the judge offers helpful verbal comments for the benefit of the club. On the other hand, upon the occasion of judging a final contest or a salon, comments may be brief or even omitted. In other words, judging normally is part of the clubs' educational operation. Any comments by a judge for the purpose of helping members to make better pictures meets the needs of the occasion.

### Severe or Lenient?

What about this business of whether the judge should be severe or lenient? Severity and leniency could be attributes of judging, yet it would seem that the only indispensable and essential requirement is that the judge be fair, unbiased, impartial. After all, the chief objective of print and slide judging is selecting the best picture, or pictures, without being influenced by extraneous factors.

It may be that, actually, clubs do not mean that judges are harsh when they are said to be severe. Nor do they mean that judges are easy when they are found to be lenient. The severe judge can be most helpful if he elucidates. And the lenient judge can be most harmful if he condones inferior work.

What camera clubs apparently need most are judges who can be severely critical, yet inspiring. Who can make the producers of inferior work appreciate why their work is inferior and be encouraged to do better. Point here is that severity must be based upon knowledge and be used as an inspiration to better things rather than as a cloak for judicial ignorance.

### Inspiration or Offense?

It is customary among some camera clubs to ask judges to be lenient with beginners lest they become discouraged and quit the club. There are problems of management and ethics, and perhaps of diplomacy.

Theoretically the beginner should learn to be able to take it. He should get it, too, right on the nose when his work is so poor as to merit it. One of the troubles, however, is that the beginner does not realize when or how his work is inferior. Consequently, he is helped most by that judge who does not refrain from telling the beginner in no uncertain terms that his work is inferior. The judge also tells him in

equally understandable language how to improve it.

### Solving the Problem

Possibly one of the neatest ideas for achieving fair treatment for club members and their pictures has been put into practice by the Stamford, Conn. CC. Knowing that good judges are none too numerous, that the best of human beings can have their "off" nights and that member satisfaction derives from confidence that treatment is fair, the Stamford club indulges in multiple judging.

It has "in-club" judgings and it has "out-club" judgings! For the "in-club" judgings the club's prints and slides are judged before the club each month by a flesh-and-blood judge. For "out-club" judgings the same pictures are sent each month to a judge of standing and reputation who, in his own home, writes his ratings of and comments upon each picture. Neither judge is aware of the other's identity or decisions.

The ratings are assigned by both judges then are considered in the members' scores. Some method of arithmetical necromancy has been developed for their reconciliation. Major point here is that all members' prints and slides are judged twice, by different judges and under different conditions, on the theory that two heads are better than one, and that two opinions may coincide.

So far as the education of the clubs' members in making better prints is concerned the Stamford method appears to combine the brighter aspects of campus and correspondence pedagogy. Possibly as in all judgings this system sometimes produces fantastic results, it seems to be giving general satisfaction.

Also, when prints, slides, ratings and comments return from the "out-club" judgings the club has acquired for itself another program feature!

### Study Methodology

Studies in the methodology of judging currently conducted by the Stereo Society of America promise to contribute to progress in print and slide judging also. The same basic principles appear to be applicable, although approach and emphasis may vary between the arts. Purpose of the studies is to determine those factors which make for fully balanced judging rather than to establish hard-and-fast judging methods.

The Society, incorporated in 1946 at New York, is utilizing five judges. Each is responsible for evaluating one phase of stereo excellence, but also assigns personal value to the four other phases. All judging is done with viewers having constant illumination and optical distance.

### CALLING ALL

TO ENTER

### American Photography's Monthly Camera Club Print Competition!

A MERICAN PHOTOGRAPHY wants the world to see the representative work of camera clubs. Every month AMERICAN PHOTOGRAPHY will publish photographs made by members of camera clubs.

Every month AMERICAN PHOTOGRAPHY will present to that club whose photographs are published a decorative plaque engraved with the names of the club and of the makers of the prints. Every 12 months AMERICAN PHOTOGRAPHY will present a Grand Trophy to that club whose photographs are adjudged best of the year.

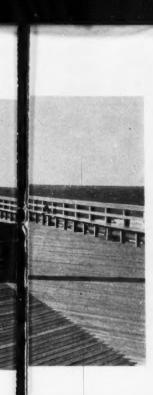
No entry blanks, no entry fees, no complicated requirements. Just some simple rules. Read them:

- 1. Competition open to ALL camera clubs.
- Each club submits at least six (6) photographs made by its members. Any size, any subject, any type, but 8x10 glossies are preferred.
- All entries must be accompanied by return postage. AMERICAN PHOTOGRAPHY cannot return entries unaccompanied by postage, nor accept responsibility for loss or damage in transit.
- 4. To the back of each print, and on the official stationery of the club, affix (a) name and address of club, (b) name and address of maker, (c) title, and (d) complete technical data.
- 5. Address entries to: Monthly Camera Club Print Competition, AMERICAN PHOTOGRA-PHY, 136 East 57th St., New York 22, N.Y.
  - 6. Deadline for each month-the 15th.
- The editorial staff of AMERICAN PHO-TOGRAPHY will be the jury, and its decisions shall be final.
- 8. Each club whose prints are published will receive a decorative plaque engraved with names of club and print-makers.
- Each year, a Grand Trophy will be awarded to that club whose work is adjudged "Best-of-Year."



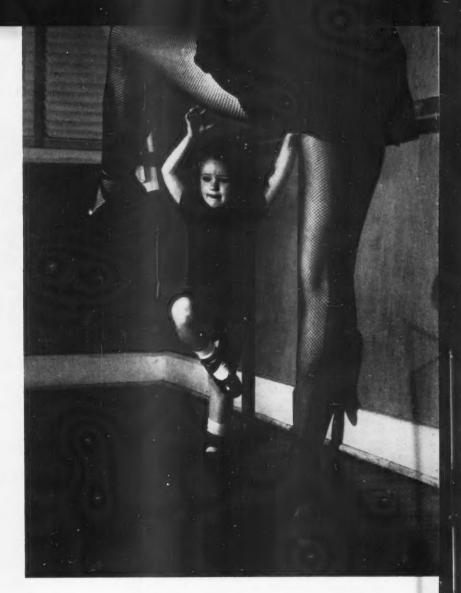
### MONTHLY PRINT COM





### PETITION

"Beginner," right, by Sgt. Evanoski receives first award. "The Stick of Candy," left, by Charlotte Estey, and the untitled shot above, by Donald Snyder, are mentions.



Highest honors in American Photography's May Print competition are awarded to Sgt. Anthony Evanoski, of Newport News, Va., for his ballet photograph, Beginner. Using Super Pan Press film in a 4x5 | Speed Graphic, he exposed his ahot 1/200 second at f/16, employing double flash.

Sgt. Evanoski is associated with the Ferguson Park Camera Club.

Donald Snyder, of Brooklyn, N. Y., and Charlotte Estey, of Providence, R. I., receive mention for the prints shown here.

Mr. Snyder used a Leica III C with f/2

lens, Supreme film exposed 1/60 second at f/5.6 for his untitled shot above. He developed in 777 and printed on Velour Black BT.

Miss Estey's The Stick of Candy was taken with a Rolleiflex, Zeiss Tessar f/3.5 lens. Her exposure was 1/10 second at f/8, using photoflood. She is associated with the Providence Engineering Society Camera Club.

### BALTIMORE EXPERIMENTS FOR 1952 SALON

The annual salon sponsored by the Baltimore Camera Club has been hung for some years now in the Baltimore Museum of Fine Art. However, in 1951, the museum's board decided to discontinue this on the basis that the pictorialist salons were "monotonous and repetitious" and imitative of salons successful in the past.

As a compromise, this year the museum has agreed to hang the show for an additional year if the jury were to consist of three prominent artists—not photographers.

The Baltimore club is speculating as to what such a jury will select, whether it will be the traditional pictorialist material or whether it will select documentary, abstract or other types of material. Consequently, it is expected that a number of photographers who do not ordinarily submit to salons will send their work for considerations.

As far as possible, under this new jury, the club will attempt to follow PSA recommended practices. Details for submission of prints are in the adjoining salon listing.

### AMERICAN DIETETIC ASSOCIATION CONTEST

The second annual contest for photographs portraying activities carried on by the dietician or nutritionist in her work, has been announced by the American Dietetic Association. The contest opens April 15 and closes June 15.

Subject matter, however, is restricted to the life and activities of dieticians and nutritionists. Close up action pictures are preferred, but the setting may be either in or out of doors.

Totaling \$200, 18 prizes will be awarded by judges Nowell Ward, ARPS; Warren Wetherell, advertising consultant and designer, and Dr. Margaret Ohlson, president of the American Dietetic Association.

Anyone may enter the competition, and any number of 8x10 black-and-white glossy prints may be submitted by each contestant.

For full information and entry forms, write the Contest Editor of the American Dietetic Association, 620 No. Michigan Ave., Chicago 11, Ill.

Please send a copy of your exhibition catalog and rules for entry to

Frank J. Heller, FRPS, APSA Editor, American Annual Who's Who 1720 Cherokee Place Bartlesville, Oklahoma, U.S.A.

in order for your exhibition to be included in the American Annual of Photography Who's Who.

### SALON CALENDAR

Salon and Exhibit	Address	Closing Date	Entry	
Fifth El Camino Real Interna- tional Color Slide Exhibition Los Angeles, Calif. (Apr. 29-May 15, 1952)	George French Exhibition Chairman 3877 Olmstead St. Los Angeles 8, Calif.	Apr. 12		
Salon of Photography Burpee Art Gallery Rockford, Ill.	Mrs. Carl S. Johnson Salon Secretary Rockford Lens and Shutter Club 6712 No. Second St. Rockford, Ill.	Apr. 15		
14th Buffalo International Exhibition of Nature Photography Buffalo Museum of Science Buffalo, N.Y. (May 6-31, 1952) Third Southgate International Salon of Colour Slides (May 17-31, 1952)	419 Riley St. Buffalo 8, N.Y.	April 23		
	N. F. Kember 13, Ravenscraig Rd. New Southgate London N. 11 England	Apr. 23	2x2 and 2¾x23 slides	
Tenth St. Louis International Exhibition of Pictorial Photography and Third Exhibition of Color Pho- tography The Artists Guild (May 10-24, 1952)	Fred C. Kirby, Chairman 512 Missouri-Pacific Building St. Louis 3, Mo.	Apr. 23	\$2 print fee \$1 slide fee write for details	
national Salon of Pho- tography Cincinnati Art Museum Cincinnati, Ohio (May 7-21, 1952)	Raymond E. Riedinger General Chairman 3875 Kirkup Ave. Cincinnati 13, Ohio	Apr. 26	•	
Eighth Annual Exhibition of Photography Preston Hall Eaglescliffe England (May 31-June 15, 1952)	James B. Milnes Hon. Exhibition Secretary 10, Whitton Rd. Fairfield Stockton-on-Trees Co. Durham, England	May 7 Pictorial,	write for details	
1952 Baltimore International Salon of Photography Baltimore Museum of Art (May 31-June 22, 1952)	Paul V. Forrest, Jr. 23 Leslie Ave. Baltimore 6, Md.	May 10	\$2 fee monochrome or color on mounts from 14x18 to 20x24	
12th International Focus Salon R.A.I. Buildings Amsterdam (June 27-July 6, 1952)	Direction 12th International Focus Fotosalon of Amster- dam Secretary: Zuider Stationsweg 33 Bloemendaal, Holland	May 15	Write for details	
Southwest International Ex- hibition of Photography San Diego County Fair (June 27-July 6, 1952)	P. O. Box 578 Del Mar, Calif.	June 8 Color Trans- parencies. June 13	\$1 color trans- parency fee \$1 pictorial fee write for details	
Slide Exhibition The Berks Camera Club	Berks Camera Club Norman E. Weber, Chairman 550 No. 11th St. Reading, Pa.	May 19	write for details	
14th Annual Finger Lakes Salon of Photography Auburn Camera Club (June 7-30, 1952)	Auburn Camera Club c/o Cayuga Museum of History & Art Auburn, N.Y.	June 3		
South Shields International Exhibition of Pictorial Photography Public Library South Shields Co. Durham England, (1912)	J. E. Garrick, Hon. Secretary 12 Bywell Rd, Cleadon Nr. Sunderland Co. Durham England	June 6	No fee write for details	
Fifth International Exhibition of Pictorial Photography in Denmark Charlottenborgs Art Gallery, Copenhagen (August 10-24, 1952)	Aage Remfeldt, President Havdrup, Denmark	July 1	4 prints \$1 fee prints to be no larger than 30x40 cm unmounted Write for detail	
Memphis Pictorialist Salon Brooks Art Gallery (July 1-28, 1952)	Mrs. Louise Clark Brooks Art Gallery Overton Park Memphis, Tenn.	June 16	•	
14th International Exhibition of Photography Fine Arts Camera Club Evansville, Ind. (Aug. 3-17, 1952) Cleveland Salon Cleveland, Ohio (Sept. 8-30, 1952)	Mr. George Basker, Chairman 1456 Brookside Dr. Evansville, Ind.	July 19	•	
Cleveland Salon Cleveland, Ohio (Sept. 8-30, 1952)	Mary Jane Matheson 12317 McGowan Ave. Cleveland, Ohio	Aug. 15	write for details	

Photographic Society of America rules observed. Please submit salon calendar notices at least ten weeks in advance of publication to: The Editor, AMERICAN PHOTOGRAPHY, 136 East 57th St., New York 22, N.Y.

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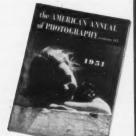
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OK-we admit it, and apologize to many AmPhoto readers who were disappointed in February. The lest 3-book Bargain Offer to AmPhoto readers completely cleaned us out of one of the three books. We bought more-all the publisher had. We scoured the USA for more books. But we still had to return 476 cupons te disappointed readers. We're genuinely serry . . we had no idea we'd get such a response.

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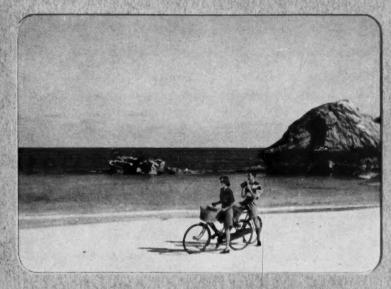
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